Scheduling Status: S3

Proprietary name and dosage form:

Rautevene® solution for injection / concentrate for solution for infusion

Composition:

Each 5 ml ampoule contains 100 mg iron in the form of iron (III)-hydroxide sucrose complex, 20 mg iron per ml.

Excipient: Water for injection.

Osmolarity: Approximately 1250 mOsmol/l.

Contains no preservatives.

Contains sugar (approximately 30 % sucrose).

Pharmacological classification:

A 8.3 Erythropoietics (haematinics).

Pharmacological action:

Pharmacodynamic properties:

The polynuclear iron (III)-hydroxide cores are superficially surrounded by a large number of non-covalently bound sucrose molecules resulting in a complex with a molecular weight of approximately 43 kD.

This is sufficiently large to prevent renal elimination.

The resulting complex is stable and does not release ionic iron under physiologic conditions.

The iron in the polynuclear cores is bound in a similar structure to naturally occurring ferritin.

Pharmacokinetic properties:

The pharmacokinetics of the iron (III)-hydroxide sucrose complex was studied in healthy volunteers following the administration of a single intravenous injection of 100 mg iron. Peak serum iron concentrations, averaging 538 µmol/l were reached 10 minutes after injection.

The volume of distribution of the central compartment corresponds to the serum volume (approximately 3 litres).

The iron injected is quickly cleared from the serum. The distribution half-life is approximately 6 hours. The volume of distribution at steady state is about 8 litres. This indicates a low iron distribution in the body fluid.

As a result of the lower stability of the iron (III) hydroxide-sucrose complex compared with transferrin, competitive exchange of iron to transferrin was observed, resulting in iron transport of approximately 31 mg Fe (III) per 24 hours.

Renal elimination of iron, occurring in the first 4 hours after injection, corresponds to less than 5 % of the total body clearance (approximately 20 ml/minute).

After 24 hours the serum iron levels decreased to the pre-dose iron concentration and, approximately 75 % of the sucrose dose was excreted.

Indications:

Severe iron deficiency in adult patients not tolerating or responding to oral iron.

RAUTEVENE is recommended for use only where the indication is definite and confirmed by appropriate investigations.

Contraindications:

The use of RAUTEVENE is contraindicated in the following conditions:

- Anaemias not caused by iron deficiency (e.g. haemolytic anaemias).
- Known hypersensitivity to iron monosaccharide or disaccharide complexes or any of the ingredients of RAUTEVENE.
- Iron storage disease (iron overload e.g. haemochromatosis, haemosiderosis).
- Disturbances in utilisation of iron (e.g. thalassaemia, sideroachrestic anaemias).
- Clinical or biochemical evidence of liver damage.
- Infectious hepatitis.
- Acute or chronic infection.
- A history of asthma, eczema, other allergic disorders or anaphylactic reactions.
- The safety in children has not been established.
- The safety in lactation has not been established.

- First trimester of pregnancy.

Warnings and special precautions:

RAUTEVENE contains sucrose.

Patients with rare hereditary conditions such as fructose intolerance, glucose-galactose mal-absorption or sucrase-isomaltase insufficiency should not take RAUTEVENE.

The sucrose contained in RAUTEVENE may have an effect on the glycaemic control of patients with diabetes mellitus.

RAUTEVENE has a pH of 11 and must therefore be given **strictly by the intravenous route**.

The maximum daily dose of 200 mg should not be exceeded.

RAUTEVENE should only be used for the approved indications.

RAUTEVENE should only be administered if iron deficiency has been diagnostically established and confirmed by suitable laboratory tests (e.g. blood ferritin levels, haemoglobin, haemocrit or red blood cell count) and, calculated from the latter mean corpuscular volume (MCV), mean corpuscular haemoglobin (MCH) and mean corpuscular haemoglobin concentration (MCHC).

RAUTEVENE may cause hypersensitivity reactions including serious and potentially fatal anaphylactic/anaphylactoid reactions. Hypersensitivity reactions have also been reported after previously uneventful exposure to parenteral iron complexes.

The risk is enhanced for patients with known allergies including medicine allergies and patients with a history of severe asthma, eczema or other atopic allergy.

There is an increased risk of hypersensitivity reactions to parenteral iron complexes in patients with immune or inflammatory conditions (e.g. systemic lupus erythematosus, rheumatoid arthritis).

RAUTEVENE should only be administered in an environment where full resuscitation can be assured and when staff trained to evaluate and manage anaphylactic reactions is immediately available. Each patient should be observed for adverse effects for at least 30 minutes following each

RAUTEVENE injection. 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 1:1 000 epinephrine (adrenaline) solution. Additional treatment with antihistamines and/or corticosteroids should be given as appropriate.

Hypotensive episodes may occur if the injection is administered too rapidly.

Patients with low binding capacity and/or folic acid deficiency are at increased risk of allergic or anaphylactic reactions.
Paravenous leakage must be avoided. In cases of inadvertent paravenous leakage, and while the needle is still inserted, rinse with a small amount of 0,9 % *m/v* sodium chloride solution.

Porphyria: Safety has not been established.

Effects on ability to drive and use machines:
After being given RAUTEVENE, the patient may feel dizzy, confused or lightheaded.
If this happens, the patient should be advised not to drive or use any machinery.

Interactions:
RAUTEVENE should not be administered concomitantly with oral iron preparations, since the absorption of oral preparations is reduced.

Pregnancy and lactation:
RAUTEVENE should not be used in the first trimester of pregnancy (see **Contraindications**).
In the second and third trimester RAUTEVENE should only be used after careful benefit-risk assessment and only in cases of severe iron deficiency anaemia where there is an inability to absorb or tolerate adequate amounts of oral iron.
Safety during lactation has not been established.
Mothers on RAUTEVENE should not breastfeed their infants.

Dosage and directions for Use:

RAUTEVENE should not be administered in combination with oral iron preparations.
RAUTEVENE must not be mixed with other medicines for simultaneous administration.
The only recommended diluent for an infusion is a 0,9 % *m/v* sodium chloride solution.

RAUTEVENE is for single use only – Please discard any unused portion.

Ampoules should be visually inspected for damage before use and only those with a sediment free solution may be used.
From a microbiological point of view, the product should be used immediately after first opening the container or after dilution with sterile 0,9 % *m/v* sodium chloride.
Residual solvents must be discarded, once the ampoule has been opened.

Administration:
RAUTEVENE must be administered by slow intravenous injection, by an intravenous drip infusion or, in patients receiving haemodialysis, into the venous limb of the dialyser (see **Warnings and special precautions**).
RAUTEVENE is a strongly alkaline solution and must never be administered by the subcutaneous or intramuscular route.
Paravenous leakage must be avoided because leakage of RAUTEVENE at the injection site may lead to pain, inflammation, tissue necrosis, and brown discolouration of the skin.

RAUTEVENE is not suitable for intramuscular use or for TDI (Total Dose Infusion).

TEST DOSE:
Before administration of the first therapeutic dose of RAUTEVENE in all patients, a test dose of 1 to 2,5 ml RAUTEVENE (20 to 50 mg iron) should be given by the chosen method of administration (see below).
If no adverse reaction occurs within a waiting period of at least 15 minutes after administration, the remaining portion of the initial dose may be given.

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

RAUTEVENE should only be administered in an environment where full resuscitation facilities can be assured and when staff trained to evaluate and manage anaphylactic reactions is immediately available. The patient should be observed for adverse effects for at least 30 minutes following each RAUTEVENE injection (see **Warnings and special precautions**).

Infusion:

The content of one ampoule has to be diluted exclusively in 100 ml of sterile 0,9 % *m/v* sodium chloride solution, immediately prior to infusion (i.e. 2 ampoules in 200 ml sterile 0,9 % *m/v* NaCl).
The first 25 mg of iron (i.e. 25 ml of solution) should be infused as a test dose over a period of 15 minutes (see above TEST DOSE). If no adverse reaction occurs during this time then the remaining portion of the infusion should be given.

Dilution must take place immediately prior to infusion and the solution should be administered as follows:

- 100 mg iron (5 ml RAUTEVENE) in at least 15 minutes
- 200 mg iron (10 ml RAUTEVENE) in at least 30 minutes

Intravenous injection:

As an intravenous injection RAUTEVENE must be administered slowly at a rate of 1 ml undiluted solution per minute (i.e. 5 minutes per ampoule), not exceeding 2 ampoules RAUTEVENE (200 mg iron) per injection.
Before administering a slow intravenous injection, a test dose of 1 ml (20 mg of iron) should be injected slowly over a period of 1 to 2 minutes.

If within 15 minutes of completing the test dose no adverse event occurs, the remaining portion of the injection may be given.

Injection into dialyser:

RAUTEVENE may be administered during a haemodialysis session directly into the venous limb of the dialyser under the same procedures as those outlined for intravenous injection.

Dosage:

Calculation of dosage:

Adults and the elderly:

The total cumulative dose of RAUTEVENE is determined by the haemoglobin level and body weight. The dose and dosage schedule for RAUTEVENE must be individually estimated for each patient based on a calculation of the total iron deficit.

Total iron deficit [mg] = body weight [kg] **x** (target Hb – actual Hb) [g/dl] **x** 2,4* **+** depot iron [mg].

Below 35 kg weight: Target Hb **=** 13 g/dl resp. depot iron **=** 15 mg/kg body weight

Above 35 kg body weight: Target Hb **=** 15 g/dl resp. depot iron **=** 500 mg

* Factor 2,4 = 0,0034 x 0,07 x 1 000 x 10

Where : 0,0034 = Iron content of haemoglobin = 0,34 %
0,07 = Blood volume = 7 % of body weight
1 000 = Factor = conversion from g to mg
10 = Factor = conversion from g/dl to g/l

TOTAL NUMBER OF RAUTEVENE AMPOULES TO BE ADMINISTERED.

Body weight kg	Haemoglobin 6 g/dl	Haemoglobin 7,5 g/dl	Haemoglobin 9 g/dl	Haemoglobin 10,5 g/dl
30	9,5	8,5	7,5	6,5
35	12,5	11,5	10,0	9,0

40	13,5	12,0	11,0	9,5
45	15,0	13,0	11,5	10,0
50	16,0	14,0	12,0	10,5
55	17,0	15,0	13,0	11,0
60	18,0	16,0	13,5	11,5
65	19,0	16,5	14,5	12,0
70	20,0	17,5	15,0	12,5
75	21,0	18,5	16,0	13,0
80	22,5	19,5	16,5	13,5
85	23,5	20,5	17,0	14,0
90	24,5	21,5	18,0	14,5

Total ampoules of RAUTEVENE to be administered = $\frac{\text{Total iron deficit (mg)}}{100 \text{ mg}}$

The total single dose must not exceed 200 mg of iron given not more than three times per week. If the total necessary dose exceeds the maximum allowed single dose, then the administration has to be split.

Children:

RAUTEVENE is not recommended for use in children since the use of RAUTEVENE in children has not been adequately studied.

Side effects:

Cardiac disorders:

Less frequent: Tachycardia and palpitations.

Vascular disorders:

Less frequent: Hypotension and collapse.

Gastro-intestinal disorders:

Less frequent: Nausea, vomiting, abdominal pain, diarrhoea.

General disorders and administrative site conditions:

Less frequent: Fever, shivering, flushing, chest pain and tightness.
Injection site disorders such as superficial phlebitis, burning, swelling.
Fatigue, asthenia, malaise.
Hyperhidrosis.

Immune system disorders:

Less frequent: Anaphylactic and anaphylactoid reactions (involving arthralgia), peripheral oedema, angioedema.

Nervous system disorders:

Frequent: Transient taste perversions (in particular metallic taste).

Less frequent: Reduced level of consciousness, lightheaded feeling, confusion, headache, dizziness, paraesthesia.

Musculoskeletal, connective tissue and bone disorders:

Less frequent: Muscle cramps, myalgia, swelling of joints, back pain.

Respiratory, thoracic and mediastinal disorders:

Less frequent: Bronchospasm, dyspnoea.

Skin and subcutaneous tissue disorders:

Less frequent: Pruritus, urticaria, rash, exanthema, erythema.

Known symptoms of overdosage and particulars of its treatment:

Overdosage can cause acute iron overloading which may manifest itself as haemosiderosis.

Particular caution should be exercised to avoid iron overload where anaemia, non-response to treatment, has been incorrectly diagnosed as iron deficiency anaemia (see **Contraindications**). Overdosage should be treated, if required, with an iron chelating agent.

Identification:

Dark brown colloidal solution in 5 ml clear glass ampoules.

Presentation:

5 ml clear glass ampoules in packs of 5 ampoules.

Storage instructions:

Store at or below 25 °C, in the original carton until required for use.

Do not refrigerate or freeze.

***Solution for injection**:*

Once the ampoules have been opened they should be used immediately.

***Concentrate for solution for infusion**:*

Once prepared (diluted), the solution for infusion should be used immediately.

KEEP OUT OF REACH OF CHILDREN.

Registration number: 46/8.3/0849

Name and business address of the holder of the certificate of registration:

Gen-Eye (Pty) Ltd[1]

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Date of publication of the package insert:

Date of registration: 05 December 2013

Date of the most recently revised package insert as approved by SAHPRA: 09 February 2022

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[1] Company Registration number: 2009/009360/07

Namibia:
Scheduling status: NS2
Registration no. 15/8.3/0143

Skeduleringstatus: S3

Eiendomsnaam en doseervorm:

Rautevene® oplossing vir inspuiting / konsentraat vir oplossing vir infusie

Samestelling:

Elke ampule bevat 100 mg yster as yster-(III)-hidroksiedsukrosekompleks met 20 mg yster per ml.

Hulpstof: Water vir inspuiting.

Osmolariteit: Ongeveer 1 250 mOsmol/l.

Bevat geen bewaarmiddels nie.

Bevat suiker (ongeveer 30 % sukrose).

Farmakologiese klassifikasie:

A 8.3 Eritropoiëtika (hematinika).

Farmakologiese werking:

Farmakodinamiese eienskappe:

Die meerkernige yster-(III)-hidroksieddeeltjies is losweg omring deur 'n groot aantal nie-kovalentgebonde sukrosemolekules in 'n kompleks met 'n molekulêre massa van ongeveer 43 kD.

Dit is groot genoeg om uitskeiding deur die niere te verhoed.

Die gevormde kompleks is stabiel en onder fisiologiese toestande stel dit nie ioniese yster vry nie.

Die yster in die meerkernige deeltjies is in dieselfde struktuur as in natuurlik voorkomende ferritien gebind.

Farmakokinetiese eienskappe:

Die farmakokinetika van die yster-(III)-hidroksiedsukrosekompleks is na 'n enkele binneaarse inspuiting van 100 mg yster in gesonde vrywilligers bestudeer. Piek konsentrasies van yster in die serum, gemiddeld 538 µmol/l, word 10 minute na die inspuiting bereik.

Die volume van verspreiding van die sentrale kompartement stem ooreen met die serumvolume (ongeveer 3 liter).
Die ingespuite yster word vinnig uit die serum opgeruim. Die halfleeftyd van verspreiding is ongeveer 6 uur.
Die volume van verspreiding by gelykvlakke is ongeveer 8 liter. Dit toon 'n lae verspreiding van yster in die liggaamsvloeistof.
Omdat die yster-(III)-hidroksiedsukrosekompleks minder stabiel as transferrien is, vind mededingende uitruiling van yster na transferrien plaas, wat lei tot ystertransport van ongeveer 31 mg Fe(III) per 24 uur.
Uitskeiding van yster deur die niere, wat in die eerste 4 ure na die inspuiting voorkom, is minder as 5 % van die totale opruiming uit die liggaam (ongeveer 20 ml/minuut).
Na 24 uur neem die serumvlakke van yster af tot konsentrasies soos voor die dosis en ongeveer 75 % van die dosis sukrose is dan uitgeskei.

Indikasies:

Erge ystertekort in volwasse pasiënte wat orale yster nie kan verdra nie of nie daarop reageer nie. RAUTEVENE word aanbeveel vir gebruik waar die aanduiding duidelik en deur toepaslike ondersoeke bevestig is.

Kontra-indikasies:

Gebruik van RAUTEVENE is onder die volgende omstandighede teenaangedui:

- Bloedarmoede wat nie deur ystertekort veroorsaak word nie (bv. hemolitiese anemie).
- Bekende hipersensitiwiteit teenoor ystermonosakkaried- of disakkariedkomplekse of enige van die bestanddele van RAUTEVENE.
- Ysterbergingsiekte (ysteroorbelading, bv. hematochromatose, hematosiderose).
- Versteurings in die gebruik van yster (bv. talassemie, sideroakrestiese anemie).
- Kliniese of biochemiese getuienis van lewerskade.
- Infektiewe hepatitis.
- Akute of chroniese infeksie.
- 'n Geskiedenis van asma, ekseem, ander allergiese siektes of anafilaktiese reaksies.
- Die veiligheid vir kinders is nie bepaal nie.

- Die veiligheid tydens borsvoeding is nie bepaal nie.
- Eerste trimester van swangerskap.

Waarskuwings en spesiale voorsorgmaatreëls:

RAUTEVENE bevat sukrose.

Pasiënte met seldsame oorerflike toestande soos fruktose-onverdraagbaarheid, glukose-galaktosewanabsorpsie of sukrase-isomaltase-ontoereikendheid moet nie RAUTEVENE gebruik nie.

Die sukrose in RAUTEVENE kan 'n effek op die glukemiese beheer in pasiënte met diabetes mellitus kan hê.

RAUTEVENE het 'n pH van 11 en moet daarom **slegs intraveneus gegee word**.

Die maksimum daaglikse dosis van 200 mg moet nie oorskry word nie.

RAUTEVENE moet slegs vir die goedgekeurde indikasies gebruik word.

RAUTEVENE moet slegs toegedien word indien ystertekort diagnosties bepaal en met geskikte laboratoriumtoetse bevestig is (bv. ferritienvlakke in die bloed, hemoglobien, hematokrit of rooibloedseltelling), en bereken vanaf die laasgenoemde die gemiddelde korpuskulêre volume (GKV), gemiddelde korpuskulêre hemoglobien (GKH) en gemiddelde korpuskulêre hemoglobienkonsentrasie (GKHK).

RAUTEVENE kan hipersensitiwiteitsreaksies veroorsaak, waaronder ernstige en potensieel dodelike anafilaktiese/anafilaktoïede reaksies. Hipersensitiwiteitsreaksies is ook gerapporteer na vorige blootstelling sonder enige voorvalle aan parenterale ysterkomplekse.

Die risiko is groter vir pasiënte met bekende allergieë, waaronder allergie vir medisyne en pasiënte met 'n geskiedenis van ernstige asma, ekseem of ander atopiese allergieë.

Daar is 'n groter risiko vir hipersensitiwiteitsreaksies teenoor parenterale ysterkomplekse in pasiënte met immuun- of inflammatoriese toestande (bv. sistemiese lupus eritematosus, rumatoïede artritis).

RAUTEVENE moet slegs toegedien word in 'n omgewing waar volle resussitasie verseker kan word en wanneer personeel opgelei om anafilaktiese reaksies te evalueer en te bestuur onmiddellik

beskikbaar is. Elke pasiënt moet ten minste 30 minute na elke RAUTEVENE-inspuiting vir nadelige effekte dopgehou word. As hipersensitiwiteitsreaksies of tekens van onverdraagbaarheid tydens toediening voorkom, moet die behandeling onmiddellik gestop word. Fasiliteite vir kardiale respiratoriese resussitasie en toerusting vir die hantering van akute anafilaktiese/anafilaktoïede reaksies moet beskikbaar wees, waaronder 'n inspuitbare oplossing van 1: 1 000 adrenalien (epinefrien). Bykomende behandeling met antihistamiene en/of kortikosteroïede moet soos nodig gegee word.

Episodes van hipotensie kan voorkom as die inspuiting te vinnig gegee word.
Pasiënte met 'n lae bindingskapasiteit en/of foliensuurtekort het 'n hoër risiko vir allergiese of anafilaktiese reaksies.
Paraveneuse lekkasie moet vermy word. In geval van onopsetlike paraveneuse lekkasie en terwyl die naald nog in die aar is, moet daar gespoel word met 'n klein hoeveelheid 0,9 % *m/v* natriumchloriedoplossing.
Porfirie: Die veiligheid is nie bepaal nie.

Effek op die vermoë om motor te bestuur en masjiene te gebruik:
Na toediening van RAUTEVENE kan die pasiënt duiselig, verward of lighoofdig voel.
As dit gebeur, moet die pasiënt aangeraai word om nie te bestuur of enige masjinerie te gebruik nie.

Interaksies:
RAUTEVENE moet nie saam met orale ysterpreparate gegee word nie omdat die absorpsie van orale yster laer sal wees.

Swangerskap en borsvoeding:
RAUTEVENE moet nie aan borsvoedende vroue gegee word nie (kyk **Kontra-indikasies**).
RAUTEVENE moet slegs na deeglike evaluering van voordele teenoor risiko in die tweede en derde trimesters gebruik word, en slegs in gevalle van ernstige anemie vanweë ystertekort waar voldoende hoeveelhede mondelikse yster nie geabsorbeer of verdra kan word nie.
Die veiligheid tydens borsvoeding is nie bepaal nie.

Moeders wat RAUTEVENE gebruik, moet nie hul babas borsvoed nie.

Dosis en gebruiksaanwysings:

RAUTEVENE moet nie saam met orale ysterpreparate gegee word nie.
RAUTEVENE moet nie vir gelyktydige toediening met ander medisyne gemeng word nie.
Die enigste aanbevole verdunningsmiddel vir 'n infusie is 'n 0,9 % *m/v* natriumchloriedoplossing.

RAUTEVENE is vir eenmalige gebruik alleenlik - gooi die ongebruikte gedeelte asseblief weg.
Ampulles moet voor gebruik visueel vir skade geïnspekteer word en slegs dié met 'n oplossing sonder 'n neerslag kan gebruik word.
Uit 'n mikrobiologiese oogpunt moet die produk gebruik word onmiddellik nadat die houer vir eerste keer oopgemaak is of na verdunning met steriele 0,9 % *m/v* natriumchloriedoplossing.
Oplosmiddel wat oorbly, moet weggegooi word sodra die ampulle oopgemaak is.

Toediening:
RAUTEVENE moet toegedien word as 'n stadige binneaarse inspuiting, as 'n binneaarse drupinfusie of, vir pasiënte wat hemodialise ondergaan, in die veneuse been van die dialisemasjien (kyk **Waarskuwings en spesiale voorsorgmaatreëls**).
RAUTEVENE is 'n sterk alkaliese oplossing en moet nooit deur die onderhuidse of binnespierse roetes toegedien word nie.
Paraveneuse lekkasie moet vermy word omdat die lekkasie van RAUTEVENE by die inspuitplek tot pyn, inflammasie, weefselnekrose, en bruin verkleuring van die vel kan lei.

RAUTEVENE is nie geskik vir binnespierse gebruik of vir TDI (totaledosisinfusie) nie.

TOETSDOSIS:
Voor toediening van die eerste terapeutiese dosis van RAUTEVENE, moet 'n toetsdosis van 1 tot 2,5 ml RAUTEVENE (20 tot 50 mg yster) deur die gekose metode van toediening vir alle pasiënte gegee word (kyk hier onder).
Indien geen nadelige reaksies binne 'n wagperiode van 15 minute na toediening voorkom nie, kan die oorblywende deel van die aanvanklike dosis gegee word.

Monitor pasiënte noukeurig vir tekens en simptome van hipersensitiwiteitsreaksies tydens en na elke toediening van RAUTEVENE.

RAUTEVENE moet slegs toegedien word in 'n omgewing waar volle resussitasiefasiliteite verseker kan word en wanneer personeel opgelei om anafilaktiese reaksies te evalueer en te bestuur onmiddellik beskikbaar is. Die pasiënt moet ten minste 30 minute na elke RAUTEVENE-inspuiting vir nadelige effekte dopgehou word (kyk **Waarskuwings en spesiale voorsorgmaatreëls**).

Infusie:

Die inhoud van een ampule moet onmiddellik voor infusie uitsluitlik in 100 ml van 'n steriele 0,9 % *m*/*v* natriumchloriedoplossing (d.w.s. 2 ampules in 200 ml steriele 0,9 % *m*/*v* NaCl) verdun word.

Die eerste 25 mg yster (d.w.s. 25 ml van die oplossing) moet as 'n toetsdosis oor 'n tyd van 15 minute ingedrup word (kyk TOETSDOSIS hier bo). As geen nadelige reaksie in hierdie tyd voorkom nie, kan die oorblywende deel van die infusie gegee word.

Verdunning moet onmiddellik voor infusie plaasvind en die oplossing moet soos volg toegedien word:

- 100 mg yster (5 ml RAUTEVENE) in ten minste 15 minute
- 200 mg yster (10 ml RAUTEVENE) in ten minste 30 minute

Intraveneuse inspuiting:

As 'n binneaarse inspuiting moet RAUTEVENE stadig teen 'n tempo van 1 ml onverdunde oplossing per minuut toegedien word (d.w.s. 5 minute per ampule), en nie meer as 2 ampules RAUTEVENE (200 mg yster) per inspuiting nie.

Voor toediening van 'n stadige intraveneuse inspuiting, moet 'n toetsdosis van 1 ml (20 mg yster) stadig oor 'n periode van 1 tot 2 minute ingespuit word.

Indien geen nadelige reaksie binne 15 minute na toediening van die toetsdosis voorkom nie, kan die oorblywende deel van die inspuiting gegee word.

Inspuiting in die dialisemasjien:

RAUTEVENE kan tydens 'n hemodialisesessie direk volgens dieselfde prosedure as vir intraveneuse toediening in die veneuse deel van die dialisemasjien toegedien word.

Dosis:

Berekening van die dosis:

Volwassenes en bejaardes:

Die totale kumulatiewe dosis RAUTEVENE word deur die hemoglobienvlak en liggaamsmassa bepaal.

Die dosis en doseerskedule van RAUTEVENE moet individueel vir elke pasiënt op grond van 'n berekening van die totale ystertekort beraam word.

Totale ystertekort [**mg]** =

liggaamsmassa [kg] x (teiken Hb – werklike Hb) [g/dl] x 2,4* + depotyster [mg].

Massa onder 35 kg: Teiken Hb = 13 g/dl plus depotyster = 15 mg/kg liggaamsmassa

Massa bo 35 kg: Teiken Hb = 15 g/dl plus depotyster = 500 mg

* Faktor 2,4 = 0,0034 x 0,07 x 1 000 x 10

Waar:	0,0034	= Ysterinhoud van hemoglobien = 0,34 %
	0,07	= Bloedvolume = 7 % van liggaamsmassa
	1 000	= Faktor vir omskakeling van g na mg
	10	= Faktor vir omskakeling van g/dl na g/l

TOTALE AANTAL AMPULES RAUTEVENE WAT GEGEE MOET WORD.

Liggaamsmassa kg	Hemoglobien 6 g/dl	Hemoglobien 7,5 g/dl	Hemoglobien 9 g/dl	Hemoglobien 10,5 g/dl
30	9,5	8,5	7,5	6,5
35	12,5	11,5	10,0	9,0
40	13,5	12,0	11,0	9,5
45	15,0	13,0	11,5	10,0
50	16,0	14,0	12,0	10,5
55	17,0	15,0	13,0	11,0
60	18,0	16,0	13,5	11,5
65	19,0	16,5	14,5	12,0
70	20,0	17,5	15,0	12,5
75	21,0	18,5	16,0	13,0
80	22,5	19,5	16,5	13,5
85	23,5	20,5	17,0	14,0
90	24,5	21,5	18,0	14,5

Totale aantal ampules RAUTEVENE wat gegee moet word = $\frac{\text{Totale ystertekort (mg)}}{100 \text{ mg}}$

Die totale enkele dosis moet nie meer as 200 mg yster wat drie keer per week gegee word oorskry nie. As die totale benodigde dosis die maksimum toegelate enkele dosis oorskry, moet die toediening opgedeel word.

Kinders:

RAUTEVENE word nie vir kinders aanbeveel nie, omdat die gebruik van RAUTEVENE deur kinders nog nie voldoende bestudeer is nie.

Newe-effekte:

Hartversteurings:

Minder dikwels: Tagikardie en palpitasies.

Vaskulêre versteurings:

Minder dikwels: Hipotensie en ineenstorting.

Gastro-intestinale versteurings:

Minder dikwels: Naarheid, braking, buikpyn, diarree.

Algemene versteurings en by die plek van toediening:

Minder dikwels: Koors, bewerasie, blosing, borspyn en toe bors.
Versteurings by die plek van inspuiting soos oppervlakkige flebitis, brandgevoel, swelling.
Moegheid, astenie, ongesteldheid.
Hiperhidrose.

Versteurings van immuunstelsel:

Minder dikwels: Anafilaktiese en anafilaktoïede reaksies (waaronder artralgie), perifere edeem, angioedeem.

Versteurings van die senustelsel:

Dikwels: Verbygaande smaakversteuring (veral metaalsmaak).

Minder dikwels: Laer vlak van bewussyn, lighoofdigheid verwardheid, hoofpyn, duiseligheid, parestesie.

Versteurings van die muskuloskeletale stelsel, bindweefsel en skeletbene:

Minder dikwels: Spierkrampe, mialgie, swelling van gewrigte, rugpyn.

Respiratoriese, toragiese en mediastinale versteurings:

Minder dikwels: Brongospasma, dispnee.

Versteurings van die vel en subkutane weefsel:

Minder dikwels: Pruritus, urtikarie, veluitslag, eksanteem, eriteem.

Bekende simptome van oordosering en besonderhede vir die behandeling daarvan:

Oordosering kan akute oorbelading met yster veroorsaak wat as hemosiderose kan manifesteer. Wees besonder versigtig om ysteroorbelading te voorkom waar anemie, wat nie op behandeling reageer nie, foutief as 'n ystertekortanemie gediagnoseer is (kyk **Kontra-indikasies**).

Oordosering moet, indien nodig, met 'n ystercheleermiddel behandel word.

Identifikasie:

Donkerbruin kolloïedale oplossing in helder glasampules van 5 ml.

Aanbieding:

Helder glasampules van 5 ml in pakke met 5 ampules.

Bergingsinstruksies:

Bewaar op of onder 25 °C, in die oorspronklike houer totdat dit vir gebruik benodig word.

Moenie verkoel of vries nie.

Oplossing vir inspuiting:

Nadat dit oopgemaak is, moet die ampules onmiddellik gebruik word.

Konsentraat vir oplossing vir infusie:

Nadat dit aangemaak (verdun) is, moet die oplossing vir infusie onmiddellik gebruik word.

HOU BUITE BEREIK VAN KINDERS.

Registrasienommer: 46/8.3/0849

Naam en besigheidsadres van die houer van die registrasiesertifikaat:

Gen-Eye (Edms) Bpk[1]

Eenheid 7, Royal Palm Business Estate

Washingtonstraat 646

Halfway House

Midrand, 1685

Gauteng, Suid-Afrika

Datum van publikasie van die voubiljet:

Datum van registrasie: 05 Desember 2013

Datum van huidige hersiende voubiljet deur SAHPRA goedgekeur: 09 Februarie 2022

® – RAUTEVENE is 'n geregistreerde handelsmerk van Gen-Eye (Edms) Bpk

[1] Maatskappyregistrasienommer: 2009/009360/07

Namibië:
Skeduleringstatus: NS2
Registrasienommer: 15/8.3/0143