AUSTRALIAN PRODUCT INFORMATION

FLEBOGAMMA 10% DIF (HUMAN NORMAL IMMUNOGLOBULIN (IVIg) 100 mg/ml) SOLUTION FOR INFUSION

1 NAME OF THE MEDICINE

Human normal immunoglobulin

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Flebogamma 10% DIF (dual inactivation plus nanofiltration) (IVIg) is a sterile, liquid ready to use, preparation of highly purified immunoglobulin (IgG) obtained from human plasma pools. The purification process includes cold alcohol fractionation, polyethylene glycol precipitation, ion exchange chromatography, low pH treatment, pasteurisation, solvent detergent treatment and two sequential nanofiltrations through 35 nm and 20 nm pore size nanofilters connected in series.

Flebogamma 10% DIF is a highly purified (≥ 97% IgG), unmodified, human IgG that contains the antibody specificities found in the donor population. IgG subclasses are fully represented with the following approximate percents of total IgG: IgG_1 is 66.6%, IgG_2, 27.9%, IgG_3, 3.0%, and IgG_4, 2.5%. Flebogamma 10% DIF contains only trace amounts of IgA (lower than 100 micrograms/ml).

In the final formulation, Flebogamma 10% DIF contains 10 g human normal immunoglobulin and 5 g sorbitol (as stabiliser) in 100 ml of water for injections. There is no preservative in the formulation. The Fc and Fab functions are maintained in Flebogamma 10% DIF.

3 PHARMACEUTICAL FORM

Solution for infusion.

The solution is clear or slightly opalescent and colourless or pale yellow.

The pH of the solution ranges from 5 to 6 and the osmolality from 250 to 350 mOsm/kg, which is within the normal physiologic range.

4 CLINICAL PARTICULARS

4.1 THERAPEUTIC INDICATIONS

Replacement therapy indications:

- Primary Immunodeficiency (PI) Diseases
- Symptomatic hypogammaglobulinaemia secondary to underlying disease or treatment.

Immunomodulation indications:

- Idiopathic Thrombocytopaenic Purpura (ITP), in patients at high risk of bleeding or prior to surgery to correct the platelet count.
- Guillain Barré syndrome.
- Kawasaki disease.

4.2 DOSE AND METHOD OF ADMINISTRATION

Dose

The dose and dosage regimen is dependent on the indication.

In replacement therapy the dosage may need to be individualised for each patient dependent on the pharmacokinetic and clinical response. The following dosage regimens are given as a guideline.

Replacement therapy indications:

Primary Immunodeficiency (PI) Diseases

The dosage regimen should achieve a trough level of IgG (measured before the next infusion) of at least 4 - 6 g/l. Three to six months are required after the initiation of therapy for equilibration to occur. The recommended starting dose is 0.4 - 0.8 g/kg followed by at least 0.2 g/kg every three weeks.

The dose required to achieve a trough level of 6 g/l is of the order of 0.2 - 0.8 g/kg/month. The dosage interval when steady state has been reached varies from 2 - 4 weeks.

Trough levels should be measured in order to adjust the dose and dosage interval.

Symptomatic hypogammaglobulinaemia secondary to underlying disease or treatment

The recommended dose is 0.2 - 0.4 g/kg every three to four weeks.

Immunomodulation indications:

Idiopathic thrombocytopenic purpura

The clinical trials performed with the product included patients with chronic idiopathic thrombocytopenic purpura in an acute episode. For the treatment of an acute episode, 0.8 - 1 g/kg on day one, which may be repeated once within 3 days, or 0.4 g/kg daily for two to five days. The treatment can be repeated if relapse occurs.

The product has not been studied in patients diagnosed of acute idiopathic thrombocytopenic purpura.

Guillain Barré syndrome

0.4 g/kg/day for 3 to 7 days.

Experience in children is limited.

Kawasaki disease

1.6 - 2.0 g/kg should be administered in divided doses over two to five days or 2.0 g/kg as a single dose. Patients should receive concomitant treatment with acetylsalicylic acid.

The dosage recommendations are summarised in the following table:

Indication	**Dose**	**Frequency**
Replacement therapy:		
Primary Immunodeficiency (PI) diseases	- starting dose: 0.4 - 0.8 g/kg - thereafter: 0.2 - 0.8 g/kg	every 2 - 4 weeks to obtain IgG trough level of at least 4 - 6 g/l
Symptomatic hypogammaglobulinaemia secondary to underlying disease or treatment	0.2 - 0.4 g/kg	every 3 - 4 weeks to obtain IgG trough level of at least 4 - 6 g/l
Immunomodulation:		
Idiopathic thrombocytopenic purpura	0.8 - 1 g/kg or	on day 1, possibly repeated once within 3 days
	0.4 g/kg/d	for 2 - 5 days
Guillain Barré syndrome	0.4 g/kg/d	for 3 - 7 days
Kawasaki disease	1.6 - 2 g/kg or	in several doses for 2 - 5 days in association with acetylsalicylic acid
	2 g/kg	in one dose in association with acetylsalicylic acid

Method of administration

The product should be brought to room or body temperature before use.

The solution should be clear or slightly opalescent. Do not use solutions that are cloudy or have deposits.

Flebogamma 10% DIF should be infused intravenously at an initial rate of 0.01 ml/kg/min (1 mg/kg/min) for the first thirty minutes. If tolerated, advance to 0.02 ml/kg/min (2 mg/kg/min) for the second 30 minutes. Again, if tolerated, advance to 0.04 ml/kg/min (4 mg/kg/min) for the third 30 minutes. If the patient tolerates the infusion well, additional increments of 0.02 ml/kg/min may be made at 30-minute intervals up to a maximum of 0.08 ml/kg/min (8 mg/kg/min).

It has been reported that the frequency of adverse reactions to IVIg increases with the infusion rate. Infusion rates during the initial infusions should be slow. If there are no adverse reactions, the

infusion rate for subsequent infusions can be slowly increased to the maximum rate. For patients experiencing adverse reactions, it is advisable to reduce the infusion rate in subsequent infusions and limit the maximum rate to 0.04 ml/kg/min or administer IVIg at a 5% concentration (see section 4.4 Special warnings and precautions for use).

This medicinal product must not be mixed with other medicinal products or intravenous fluids. It should be administered by a separate intravenous line.

Product is for single use in one patient only. Discard any residue.

4.3 CONTRAINDICATIONS

Hypersensitivity to the active substance or to any of the excipients (see section 4.4 Special warnings and precautions for use).

Hypersensitivity to human immunoglobulins, especially in very rare cases of IgA deficiency, when the patient has antibodies against IgA.

Hereditary fructose intolerance. **In babies and young children hereditary fructose intolerance may not yet be diagnosed and may be fatal, thus, they should not receive this medicinal product.**

4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

An apparent increase in the rate of adverse events was observed in clinical trials with Flebogamma 10% DIF compared to Flebogamma 5% DIF

Flebogamma 10% DIF should be infused intravenously at an initial rate of 0.01 ml/kg/min (1 mg/kg/min) for the first thirty minutes. If tolerated, advance to 0.02 ml/kg/min (2 mg/kg/min) for the second 30 minutes. Again, if tolerated, advance to 0.04 ml/kg/min (4 mg/kg/min) for the third 30 minutes. If the patient tolerates the infusion well, additional increments of 0.02 ml/kg/min may be made at 30-minute intervals up to a maximum of 0.08 ml/kg/min (8 mg/kg/min).

Special warnings about excipients: This medicinal product contains 50 mg of sorbitol per ml as excipient. Patients with rare hereditary problems of fructose intolerance should not take this medicine. Special precautions should be taken with babies and young children because this fructose intolerance may not yet be diagnosed and may be fatal. Interferences with determination of blood glucose levels are not expected.

Infusion/administration

Certain severe adverse reactions to the medicinal product may be related to the rate of infusion. The recommended infusion rate given under section 4.2 Dose and method of administration must be closely followed. Patients must be closely monitored and carefully observed for any symptoms throughout the infusion period.

Certain adverse reactions may occur more frequently:

- in case of high rate of infusion
- in patients with hypo- or agammaglobulinaemia with or without IgA deficiency
- in patients who receive human normal immunoglobulin for the first time, or in rare cases, when the human normal immunoglobulin product is switched or when there has been a long interval since the previous infusion.

Potential complications can often be avoided by ensuring that patients:

- are not sensitive to human normal immunoglobulin by first injecting the product slowly at an initial rate of 0.01 ml/kg/min (1 mg/kg/min);
- are carefully monitored for any symptoms throughout the infusion period. In particular, patients naive to human normal immunoglobulin, patients switched from an alternative IVIg product or when there has been a long interval since the previous infusion should be monitored during the first infusion and for the first hour after the first infusion, in order to detect potential adverse signs. All other patients should be observed for at least 20 minutes after administration.

In case of adverse reaction, either the rate of administration must be reduced or the infusion stopped.

The treatment required depends on the nature and severity of the adverse reactions.

In case of shock, standard medical treatment for shock should be implemented.

In all patients, IVIg administration requires:
- adequate hydration prior to the initiation of the infusion of IVIg
- monitoring of urine output
- monitoring of serum creatinine levels
- avoidance of concomitant use of loop diuretics

Hypersensitivity

True hypersensitivity reactions are rare. They can occur in the very seldom cases of IgA deficiency with anti-IgA antibodies.

Rarely, human normal immunoglobulin can induce a fall in blood pressure with anaphylactic reaction, even in patients who had tolerated previous treatment with human normal immunoglobulin.

Thromboembolism

There is clinical evidence of an association between IVIg administration and thromboembolic events such as myocardial infarction, stroke, pulmonary embolism and deep vein thromboses which is assumed to be related to a relative increase in blood viscosity through the high influx of immunoglobulin in at-risk patients. Caution should be exercised in prescribing and infusing IVIg in obese patients and in patients with pre-existing risk factors for thrombotic events (such as advanced age, hypertension, diabetes mellitus and a history of vascular disease or thrombotic episodes, patients with acquired or inherited thrombophilic disorders, patients with prolonged periods of immobilisation, severely hypovolemic patients, and patients with diseases which increase blood viscosity).

In patients at risk for thromboembolic adverse reactions, IVIg products should be administered at the minimum rate of infusion and dose practicable.

Acute renal failure

Cases of acute renal failure have been reported in patients receiving IVIg therapy. In most cases, risk factors have been identified, such as pre-existing renal insufficiency, diabetes mellitus, hypovolemia, overweight, concomitant nephrotoxic medicinal products or age over 65.

In case of renal impairment, IVIg discontinuation should be considered.

While these reports of renal dysfunction and acute renal failure have been associated with the use of many of the licensed IVIg products, those containing sucrose as an excipient accounted for a disproportionate share of the total number. In patients at risk, the use of IVIg products that do not contain sucrose may be considered. Flebogamma DIF does not contain sucrose.

In patients at risk for acute renal failure, IVIg products should be administered at the minimum rate of infusion and dose practicable.

Haemolytic anaemia

IVIg products can contain blood group antibodies which may act as haemolysins and induce *in vivo* coating of red blood cells with immunoglobulin, causing a positive direct antiglobulin reaction (Coomb's test) and, rarely, haemolysis. Haemolytic anaemia can develop subsequent to IVIg therapy due to enhanced red blood cells (RBC) sequestration. IVIg recipients should be monitored for clinical signs and symptoms of haemolysis.

Transfusion-related acute lung injury (TRALI)

Non-cardiogenic pulmonary edema may occur in patients following Flebogamma 10% DIF treatment. TRALI is characterized by severe respiratory distress, pulmonary edema, hypoxemia, normal left ventricular function, and fever. Symptoms typically appear within 1 to 6 hours following treatment.

Monitor patients for pulmonary adverse reactions. If TRALI is suspected, perform appropriate tests for the presence of anti-neutrophil antibodies and anti-HLA antibodies in both the product and patient serum. TRALI may be managed using oxygen therapy with adequate ventilatory support.

Transmissible agents

Flebogamma 10% DIF is made from human plasma. As with all plasma derived products, the risk of transmission of infectious agents, including viruses and theoretically, the Creutzfeldt-Jakob disease (CJD) agent, cannot be completely eliminated. The risk that such products will transmit an infectious agent has been greatly reduced by screening plasma donors for prior exposure to certain viruses, by testing for the presence of certain current virus infections, and by inactivating and/or removing certain viruses.

The manufacturing process was investigated for its capacity to decrease infectivity of an experimental agent of transmissible spongiform encephalopathies (TSE) or the human equivalent of mad cow disease. These studies provided reasonable assurance that low levels of infectivity, if present in the starting material, would be removed.

Standard measures to prevent infections resulting from the use of medicinal products prepared from human blood or plasma include selection of donors, screening of individual donations and plasma pools for specific markers of infection and the inclusion of effective manufacturing steps for the inactivation/removal of viruses. Despite this, when medicinal products prepared from human blood or plasma are administered, the possibility of transmitting infective agents cannot be totally excluded. This also applies to unknown or emerging viruses and other pathogens.

The measures taken are considered effective for enveloped viruses such as HIV, HBV and HCV, and for the non-enveloped viruses HAV and parvovirus B19.

There is reassuring clinical experience regarding the lack of hepatitis A or parvovirus B19 transmission with immunoglobulins and it is also assumed that the antibody content makes an important contribution to viral safety.

It is strongly recommended that every time Flebogamma 10% DIF is administered to a patient, the name and batch number of the product are recorded in order to maintain a link between the patient and the batch of the product.

Use in the elderly

There is a limit experience in the elderly in clinical trials but no specific safety concerns have been identified in post-marketing experience to date.

Paediatric use

It is recommended to monitor vital signs when administering Flebogamma 10% DIF to paediatric patients.

Effects on laboratory tests

Interference with serological testing

After injection of immunoglobulin the transitory rise of the various passively transferred antibodies in the patient's blood may result in misleading positive results in serological testing.

Passive transmission of antibodies to erythrocyte antigens, e.g. A, B, D, may interfere with some serological tests for red cell antibodies, for example the antiglobulin test (Coomb's test).

4.5 INTERACTIONS WITH OTHER MEDICINES AND OTHER FORMS OF INTERACTIONS

Live attenuated virus vaccines

Immunoglobulin administration may impair for a period of at least 6 weeks and up to 3 months the efficacy of live attenuated virus vaccines such as measles, rubella, mumps and varicella. After administration of this product, an interval of 3 months should elapse before vaccination with live attenuated virus vaccines. In the case of measles, this impairment may persist for up to 1 year. Therefore patients receiving measles vaccine should have their antibody status checked.

4.6 FERTILITY, PREGNANCY AND LACTATION

Effects on fertility

Clinical experience with immunoglobulins suggests that no harmful effects on fertility are to be expected.

Use in pregnancy

The safety of this medicinal product for use in human pregnancy has not been established in controlled clinical trials and therefore should only be given with caution to pregnant women. Clinical experience with immunoglobulins suggests that no harmful effects on the course of pregnancy, or on the foetus and the neonate are to be expected.

Use in lactation.

Immunoglobulins are excreted in breast milk. The safety of this product for use during lactation has not been established in controlled clinical trials. Flebogamma 10% DIF should, therefore, only be given with caution to breastfeeding mothers.

4.7 EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

The ability to drive and operate machines may be impaired by some adverse reactions, such as dizziness, associated with Flebogamma 10% DIF. Patients who experience adverse reactions during treatment should wait for these to resolve before driving or operating machines.

4.8 ADVERSE EFFECTS (UNDESIRABLE EFFECTS)

Summary of the safety profile

Adverse reactions such as chills, headache, fever, vomiting, allergic reactions, nausea, arthralgia, low blood pressure and moderate low back pain have been observed.

Human normal immunoglobulins may cause a sudden fall in blood pressure and, in isolated cases, anaphylactic shock, even when the patient has shown no hypersensitivity to previous administration.

Cases of reversible aseptic meningitis, isolated cases of reversible haemolytic anaemia/haemolysis and rare cases of transient cutaneous reactions and exfoliative dermatitis, have been observed with human normal immunoglobulin.

Increase in serum creatinine level and/or acute renal failure have been observed.

Very rarely, thromboembolic reactions such as myocardial infarction, stroke, pulmonary embolism, deep vein thromboses have been observed with human normal immunoglobulin.

For safety with respect to transmissible agents, see section 4.4 Special warnings and precautions for use.

Tabulated summary of adverse reactions

Flebogamma 10% DIF is likely to cause higher rate of adverse events than 5% product, possibly, but not certainly, due to increase rate of infusion likely to occur with the use of more concentrated product.

The adverse reactions categorised according to the MedDRA system organ class reported in any patient in the 3 trials are summarised separately by indications in the tables below. Frequency of each adverse reaction calculated by infusions has been determined using the following criteria:

- very common (≥1/10)
- common (≥1/100 to <1/10)
- uncommon (≥1/1,000 to <1/100)
- rare (≥1/10,000 to <1/1,000)
- very rare (<1/10,000)
- not known (cannot be estimated from the available data)

Summary of potentially related adverse events reported by patients with primary immunodeficiency:

System Organ Class	Body System Preferred Term	ADR frequency evaluation
Cardiac disorders	Tachycardia	Common
Ear and labyrinth disorders	Ear pain	Uncommon
Eye disorders	Conjunctivitis, maculopathy	Uncommon
Gastrointestinal disorders	Nausea	Common
	Abdominal distension, abdominal pain, flatulence	Uncommon
General disorders and administration site conditions	Chest discomfort, chest pain, fatigue, feeling cold, feeling jittery, infusion site erythema, malaise	Uncommon
	Infusion site reaction, pain, pyrexia, rigors	Common
Infections and infestations	Influenza, urinary tract infection	Uncommon
Investigations	Blood pressure increased, blood pressure systolic increased, heart rate increased	Uncommon
	Body temperature increased	Common
Musculoskeletal and connective tissue disorders	Back pain, myalgia	Common
	Arthralgia, muscle spasms, muscle tightness, neck pain, pain in extremity	Uncommon
Nervous system disorder	Headache	Very common
	Dizziness, syncope vasovagal, tremor	Uncommon
Respiratory, thoracic and mediastinal disorders	Postnasal drip, sinus pain, wheezing	Uncommon
Skin and subcutaneous tissue disorders	Acne	Uncommon
Vascular disorders	Hypotension	Common
	Diastolyc hypertension, hematoma, hypertension, systolic hypertension	Uncommon
Number of patients studied: 46 patients		

Summary of potentially related adverse events reported by patients with chronic idiopathic thrombocytopenic purpura:

System Organ Class	Body System Preferred Term	ADR frequency evaluation
Blood and lymphatic system disorders	Erythropenia, leukopenia	Common
Cardiac disorders	Cyanosis	Common
Ear and labyrinth disorders	Vertigo	Common
Eye disorders	Photofobia	Common
Gastrointestinal disorders	Nausea	Very common
	Abdominal pain upper, diarrhoea, vomiting	Common
General disorders and administration site conditions	Pyrexia	Very common
	Chest discomfort, chills, feeling cold, influenza like illness, infusion related	Common

System Organ Class	Body System Preferred Term	ADR frequency evaluation
	reaction, infusion site pain, oedema peripheral	
Investigations	Blood pressure diastolic decreased, blood pressure systolic increased, body temperature increased, haemoglobin decrease, heart rate increased	Common
Metabolism and nutrition disorders	Anorexia	Common
Musculoskeletal and connective tissue disorders	Muscle tightness, myalgia	Common
Nervous system disorders	Headache	Very common
	Dizziness, radicular syndrome, tremor	Common
Respiratory, thoracic and mediastinal disorders	Epistaxis	Common
Skin and subcutaneous tissue disorders	Ecchymosis, erythema, pruritus, rash	Common
Vascular disorders	Flushing, hypertension, hypotension, thrombosis	Common
Number of patients studied: 27 patients		

Reporting suspected adverse effects

Reporting suspected adverse reactions after registration of the medicinal product is important. It allows continued monitoring of the benefit-risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions at www.tga.gov.au/reporting-problems.

4.9 OVERDOSE

Overdose may lead to fluid overload and hyper viscosity, particularly in patients at risk, including elderly patients or patients with renal impairment.

For information on the management of overdose, contact the Poisons Information Centre on 13 11 26 (Australia).

5 PHARMACOLOGICAL PROPERTIES

5.1 PHARMACODYNAMIC PROPERTIES

Pharmacotherapeutic group: immune sera and immunoglobulins: immunoglobulins, normal human, for intravascular administration, ATC code: J06BA02.

Human normal immunoglobulin contains mainly immunoglobulin G (IgG) with a broad spectrum of antibodies against infectious agents.

Human normal immunoglobulin contains the IgG antibodies present in the normal population. It is usually prepared from pooled plasma from not fewer than 1000 donors. It has a distribution of immunoglobulin G subclasses closely proportional to that in native human plasma. Adequate doses of this medicinal product may restore abnormally low immunoglobulin G levels to the normal range.

The mechanism of action in indications other than replacement therapy is not fully elucidated, but includes immunomodulatory effects.

Clinical trials

Primary immunodeficiency disease

One clinical trial IG 304 was performed with the objective of evaluating the clinical efficacy and the safety of the product. To achieve the primary objective it was used the Food and Drug Administration (FDA) efficacy criterion which includes as primary outcome the rate of serious bacterial infections of ≤ 1 serious bacterial infection/patient/year. The definition of serious bacterial infections includes the following infections: bacteremia or sepsis, bacterial meningitis, osteomyelitis or septic arthritis, bacterial pneumonia or visceral abscess. These infections had to be diagnosed by essential diagnostic features listed but not all as symptoms, physical findings, laboratory tests and imaging studies. The study was designed as a multicenter, open-label, non-randomized, clinical study in patients with PID diseases requiring antibody replacement therapy and who have been receiving IVIG replacement therapy at a steady dose for at least 3 months prior to entry. Patients participated in the study for 12 months (13 to 17 infusions based on individual dose intervals). Study participants have received Flebogamma 10% DIF intravenously at a dose of 300 to 600 mg/kg per infusion, administered every 21 or 28 days (± 4 days). Forty-six patients were enrolled in the study and received at least 1 infusion of Flebogamma 10% DIF. Thirty-seven patients (80.4%) completed the study.

The results obtained from the trial with Flebogamma 10% DIF in PID (study IG304) show that patients who received Flebogamma 10% DIF infusions of 300-600 mg/kg had a serious bacterial infection rate of 0.025 infections/patient/year (1 serious bacterial infection reported; 98% CI = 0.001-0.133).

Chronic idiopathic thrombocytopenia

Twenty-seven patients, eighteen adults at least 18 years of age, and nine children aged 3 - 15 years were enrolled in 2 open trials in which patients with chronic ITP were treated with a total dose of 2 g/kg of Flebogamma 10% DIF. The primary efficacy response was the proportion of patients with increase in platelet count to ≥ 50 x 10^9/L.
Twenty-four patients overall (89%) responded. The proportion of adult responders was 83% (15/18); the proportion of paediatric responders was 100% (9/9). The median time to response was ≤2 days for all the patients. The median duration of response was ≥13 days in all the patients. Responders recorded a median maximum platelet count of 237 x 10^9/L overall. Median time to maximum platelet count was 5 days.

5.2 PHARMACOKINETIC PROPERTIES

Human normal immunoglobulin is immediately and completely bioavailable in the recipient's circulation after intravenous administration. It is distributed relatively rapidly between plasma and extravascular fluid, after approximately 3-5 days equilibrium is reached between the intra- and extravascular compartments.

One multicenter trial to determine the clinical efficacy, pharmacokinetics and safety was performed in 46 patients with primary immunodeficiency. Trough IgG levels and other standard pharmacokinetic parameters such as serum C_{max}, AUC, half-life, clearance and volume of distribution for total IgG and subclass IgG were determined in a subgroup of 19 patients (18-58 years; 10 male). Mean trough IgG level ranged from 880 to 976 mg/dl for 21-day infusion schedule patients and from

800 to 862 mg/dl for 28-day infusion schedule patients. The mean serum half-life for total IgG was 34 and 37 days for the 21 and 28 day dosing schedule, respectively, and the mean clearances were 115 and 144 ml/day. For IgG subclasses the mean serum half-life ranged from 28 to 51 days. For both dosing schedules, the mean AUC levels for the total IgG was around 34,000 day*mg/dl, the mean C_{max} levels was around 2,000 mg/dl, and the mean volume of distribution between 5.4 and 7.5 L.

Half-life may vary from patient to patient, in particular in primary immunodeficiency.

IgG and IgG-complexes are broken down in cells of the reticuloendothelial system.

5.3 PRECLINICAL SAFETY DATA

Genotoxicity

No genotoxicity studies have been conducted with Flebogamma 10% DIF.

Carcinogenicity

No carcinogenicity studies have been conducted with Flebogamma 10% DIF.

6 PHARMACEUTICAL PARTICULARS

6.1 LIST OF EXCIPIENTS

D-sorbitol
Water for injections

Flebogamma 10% DIF contains 5 g sorbitol (as stabiliser) in 100 ml of water for injections.

6.2 INCOMPATIBILITIES

In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products.

6.3 SHELF LIFE

2 years.

6.4 SPECIAL PRECAUTIONS FOR STORAGE

Store below 30 ºC. Do not freeze. Protect from light.
Contains no antimicrobial preservative. Use in one patient on one occasion only.
Do not use after expiry date.

6.5 NATURE AND CONTENTS OF CONTAINER

Flebogamma 10% DIF is a solution for infusion supplied in a type II glass vial closed with a chloro-butyl-rubber stopper.

Flebogamma 10% DIF is supplied as 5 g/50 ml, 10 g/100 ml and 20 g/200 ml vials.
Pack size: 1 vial

Not all pack sizes may be marketed.

6.6 SPECIAL PRECAUTIONS FOR DISPOSAL

The product should be brought to room or body temperature before use.

The solution should be clear or slightly opalescent. Do not use solutions that are cloudy or have deposits.

In Australia, any unused medicine or waste material should be disposed of in accordance with local requirements.

6.7 PHYSICOCHEMICAL PROPERTIES

Chemical structure

No data available.

CAS number

None assigned.

7 MEDICINE SCHEDULE (POISONS STANDARD)

S4

8 SPONSOR

Grifols Australia Pty Ltd
5/80 Fairbank Road,
Clayton South,
Victoria, Australia
3169

For Medical/Technical Enquiries

TOLL FREE: 1800 339 479

9 DATE OF FIRST APPROVAL

10 January 2013

10 DATE OF REVISION

23 October 2018

SUMMARY TABLE OF CHANGES

Section Changed	Summary of new information
All	PI reformatted and minor editorial changes
4.8	Additional text "and exfoliative dermatitis"