Flebogamma DIF 50 mg/ml

Contraindications

Hypersensitivity to the active substance or to any of the excipients listed below:
D-sorbitol
Water for injections

Hypersensitivity to human immunoglobulins, especially in patients with antibodies against IgA.

Fructose intolerance.
In babies and young children (aged 0-2 years) hereditary fructose intolerance (HFI) may not yet be diagnosed and may be fatal, thus, they must not receive this medicinal product.

Special warnings and precautions for use

Sorbitol

Each ml of this medicinal product contains 50 mg of sorbitol. Patients with rare hereditary problems of fructose intolerance must not take this medicine.
In persons more than 2 years old with HFI, a spontaneous aversion for fructose-containing foods develops and may be combined with the onset of symptoms (vomiting, gastro-intestinal disorders, apathy, height and weight retardation). Therefore a detailed history with regard to HFI symptoms has to be taken of each patient prior to receiving Flebogamma DIF.
In case of inadvertent administration and suspicion of fructose intolerance the infusion has to be stopped immediately, normal glycaemia has to be re-established and organ function has to be stabilized by means of intensive care.

Interferences with determination of blood glucose levels are not expected.

Certain severe adverse reactions may be related to the rate of infusion. The recommended infusion rate given under section 4.2 (from the EU SmPC) 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 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 initially injecting the product slowly (at an initial rate of 0.01-0.02 ml/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 reaction. 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 patients with anti-IgA antibodies.

IVIg is not indicated in patients with selective IgA deficiency where the IgA deficiency is the only abnormality of concern.

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, cerebral vascular accident (including 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, hypovolaemia, 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 containing various excipients such as sucrose, glucose and maltose, those containing sucrose as a stabiliser accounted for a disproportionate share of the total number. In patients at risk, the use of IVIg products that do not contain these excipients may be considered. Flebogamma DIF does not contain sucrose, maltose or glucose.

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

**Aseptic meningitis syndrome (AMS)**

Aseptic meningitis syndrome has been reported to occur in association with IVIg treatment. Discontinuation of IVIg treatment has resulted in remission of AMS within several days without sequelae. The syndrome usually begins within several hours to 2 days following IVIg treatment.
Cerebrospinal fluid studies are frequently positive with pleocytosis up to several thousand cells per mm³, predominantly from the granulocytic series, and elevated protein levels up to several hundred mg/dl. AMS may occur more frequently in association with high-dose (2 g/kg) IVIg treatment.

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 (Coombs’ 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.

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 direct antiglobulin test (DAT, direct Coombs’ test).

Transmissible agents

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 that Flebogamma 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.

Paediatric population

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

Interaction with other medicinal products and other forms of interaction

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.
Paediatric population

It is expected that the same interactions than those mentioned for the adults may be presented by the paediatric population.

Fertility, pregnancy and lactation

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 and breast-feeding mothers. IVIg products have been shown to cross the placenta, increasingly after the third trimester. 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.

Breast-feeding
Immunoglobulins are excreted into the milk and may contribute to protecting the neonate from pathogens which have a mucosal portal of entry.

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

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 DIF. Patients who experience adverse reactions during treatment should wait for these to resolve before driving or operating machines.

Undesirable effects

Summary of the safety profile

Adverse reactions such as chills, headache, dizziness, fever, vomiting, allergic reactions, nausea, arthralgia, low blood pressure and moderate low back pain may occur occasionally.

Rarely 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 and rare cases of transient cutaneous reactions have been observed with human normal immunoglobulin. Reversible haemolytic reactions have been observed in patients, especially those with blood groups A, B, and AB. Rarely, haemolytic anaemia requiring transfusion may develop after high dose IVIg treatment.

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.

For safety with respect to transmissible agents see transmissible agents section from above.
Tabulated list of adverse reactions

The table presented below is according to the MedDRA system organ classification (SOC and Preferred Term Level).

Frequencies have been evaluated according to the following convention:

- 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)

Within each frequency grouping, adverse reactions are presented in order of decreasing of seriousness.

Frequency of Adverse Reactions (ADRs) in clinical studies with Flebogamma DIF 50 mg/ml

<table>
<thead>
<tr>
<th>MedDRA System Organ Class (SOC)</th>
<th>Adverse reaction</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nervous system disorders</td>
<td>Headache</td>
<td>Common</td>
</tr>
<tr>
<td></td>
<td>Dizziness</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Vascular disorders</td>
<td>Hypotension, hypertension, diastolic hypertension, blood pressure fluctuations</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Respiratory, thoracic and mediastinal disorders</td>
<td>Bronchitis, cough, wheezing</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Gastrointestinal disorders</td>
<td>Diarrhoea, nausea, vomiting, abdominal pain, abdominal pain upper</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Skin and subcutaneous tissue disorders</td>
<td>Urticaria, rash pruritic, dermatitis contact</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Musculoskeletal and connective tissue disorders</td>
<td>Back pain, arthralgia, myalgia, muscle cramp</td>
<td>Uncommon</td>
</tr>
<tr>
<td>General disorders and administration site conditions</td>
<td>Pyrexia, injection site reaction</td>
<td>Common</td>
</tr>
<tr>
<td></td>
<td>Rigors, asthenia, pain, infusion site inflammation, injection site oedema, injection site pain, injection site pruritus, injection site swelling, migration of implant</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Investigations</td>
<td>Coombs test positive, blood pressure systolic decreased, blood pressure systolic increased, body temperature increased</td>
<td>Uncommon</td>
</tr>
</tbody>
</table>

Description of selected adverse reactions

The most reported post-marketing ADRs received since the product was authorised for both concentrations were chest pain, flushing, blood pressure increased and decreased, malaise, dyspnoea, nausea, vomiting pyrexia, back pain, headache and chills.
Paediatric population

The safety results for 29 paediatric patients (those ≤ 17 years old) included in the PID studies were evaluated. It was observed that the proportion of headache, pyrexia, tachycardia and hypotension in children was higher than in adults. Assessment of vital signs in clinical trials of the paediatric population did not indicate any pattern of clinically relevant changes.

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. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

Overdose

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

Paediatric population

Information on overdose in children has not been established with Flebogamma DIF. However, as in adult population, overdose may lead to fluid overload and hyperviscosity as with any other intravenous immunoglobulins.
Flebogamma DIF 100 mg/ml

Contraindications

Hypersensitivity to the active substance or to any of the excipients listed below:

D-sorbitol
Water for injections

Hypersensitivity to human immunoglobulins, especially in patients with antibodies against IgA.

Fructose intolerance.
In babies and young children (aged 0-2 years) hereditary fructose intolerance (HFI) may not yet be diagnosed and may be fatal, thus, they must not receive this medicinal product.

Special warnings and precautions for use

Sorbitol

Each ml of this medicinal product contains 50 mg of sorbitol. Patients with rare hereditary problems of fructose intolerance must not take this medicine.

In persons more than 2 years old with HFI, a spontaneous aversion for fructose-containing foods develops and may be combined with the onset of symptoms (vomiting, gastro-intestinal disorders, apathy, height and weight retardation). Therefore a detailed history with regard to HFI symptoms has to be taken of each patient prior to receiving Flebogamma DIF.

In case of inadvertent administration and suspicion of fructose intolerance the infusion has to be stopped immediately, normal glycaemia has to be re-established and organ function has to be stabilized by means of intensive care.

Interferences with determination of blood glucose levels are not expected.

Certain severe adverse reactions may be related to the rate of infusion. The recommended infusion rate given under section 4.2 (from the EU SmPC) 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 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 initially injecting the product slowly (at an initial rate of 0.01 ml/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 IVlg 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 reaction. 
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 patients with anti-IgA antibodies.

IVIg is not indicated in patients with selective IgA deficiency where the IgA deficiency is the only 
abnormality of concern.

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, cerebral vascular accident (including 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, hypovolaemia, 
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 containing various excipients such as sucrose, glucose and maltose, those containing sucrose 
as a stabiliser accounted for a disproportionate share of the total number. In patients at risk, the use of 
IVIg products that do not contain these excipients may be considered. Flebogamma DIF does not 
contain sucrose, maltose or glucose.

In patients at risk for acute renal failure, IVIg products should be administered at the minimum rate of 
infusion and dose practicable.
Aseptic meningitis syndrome (AMS)

Aseptic meningitis syndrome has been reported to occur in association with IVIg treatment. Discontinuation of IVIg treatment has resulted in remission of AMS within several days without sequelae. The syndrome usually begins within several hours to 2 days following IVIg treatment. Cerebrospinal fluid studies are frequently positive with pleocytosis up to several thousand cells per mm³, predominantly from the granulocytic series, and elevated protein levels up to several hundred mg/dl. AMS may occur more frequently in association with high-dose (2 g/kg) IVIg treatment.

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.

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 direct antiglobulin test (DAT, direct Coomb’s test).

Transmissible agents

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 that Flebogamma 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.

Post-authorisation Safety Study

A Post-Authorisation Safety Study suggested a higher rate of infusions associated with potentially related adverse events for Flebogamma DIF 100 mg/ml compared to Flebogamma DIF 50 mg/ml (see section 5.1 from the EU SmPC).

Paediatric population

It is recommended to monitor vital signs when administering Flebogamma DIF to paediatric patients.
Interaction with other medicinal products and other forms of interaction

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.

Paediatric population

It is expected that the same interactions than those mentioned for the adults may be presented by the paediatric population.

Fertility, pregnancy and lactation

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 and breast-feeding mothers. IVIg products have been shown to cross the placenta, increasingly after the third trimester. 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.

Breast-feeding
Immunoglobulins are excreted into the milk and may contribute to protecting the neonate from pathogens which have a mucosal portal of entry.

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

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 DIF. Patients who experience adverse reactions during treatment should wait for these to resolve before driving or operating machines.

Undesirable effects

Summary of the safety profile

Adverse reactions such as chills, headache, dizziness, fever, vomiting, allergic reactions, nausea, arthralgia, low blood pressure and moderate low back pain may occur occasionally.

Rarely 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 and rare cases of transient cutaneous reactions have been observed with human normal immunoglobulin. Reversible haemolytic reactions have been observed in patients, especially those with blood groups A, B, and AB. Rarely, haemolytic anaemia requiring transfusion may develop after high dose IVIg treatment.

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.

For safety with respect to transmissible agents, see transmissible agents section from above.

Tabulated list of adverse reactions

Increase in the frequency of adverse reactions through the clinical trials likely related to the increased infusion rate has been observed (see section 4.2 from EU SmPC).

The table presented below is according to the MedDRA system organ classification (SOC and Preferred Term Level).

Frequencies have been evaluated according to the following convention:

- 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)

Within each frequency grouping, adverse reactions are presented in order of decreasing of seriousness.

Frequency of Adverse Reactions (ADRs) in clinical studies with Flebogamma DIF 100 mg/ml

<table>
<thead>
<tr>
<th>MedDRA System Organ Class (SOC)</th>
<th>Adverse reaction</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infections and infestations</td>
<td>Influenza, urinary tract infection</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Blood and lymphatic system disorders</td>
<td>Bicytopenia, leukopenia</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Metabolism and nutrition disorders</td>
<td>Anorexia</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Nervous system disorders</td>
<td>Headache</td>
<td>Very common</td>
</tr>
<tr>
<td></td>
<td>Dizziness, radicular syndrome, syncope vasovagal, tremor</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Eye disorders</td>
<td>Conjunctivitis, maculopothy, photophobia</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Ear and labyrinth disorders</td>
<td>Ear pain, vertigo</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Cardiac disorders</td>
<td>Tachycardia</td>
<td>Common</td>
</tr>
<tr>
<td>Vascular disorders</td>
<td>Hypotension</td>
<td>Common</td>
</tr>
<tr>
<td></td>
<td>Diastolyc hypertension, flushing, hematoma, hypertension, systolic hypertension, thrombosis</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Respiratory, thoracic and mediastinal disorders</td>
<td>Postnasal drip, sinus pain, wheezing</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Gastrointestinal disorders</td>
<td>Nausea</td>
<td>Common</td>
</tr>
<tr>
<td></td>
<td>Abdominal distension, abdominal pain, abdominal pain upper, diarrhoea, flatulence, vomiting</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Skin and subcutaneous tissue disorders</td>
<td>Acne, ecchymosis, erythema, pruritus, rash</td>
<td>Uncommon</td>
</tr>
<tr>
<td>MedDRA System Organ Class (SOC)</td>
<td>Adverse reaction</td>
<td>Frequency</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Musculoskeletal and connective tissue disorders</td>
<td>Back pain, myalgia</td>
<td>Common</td>
</tr>
<tr>
<td></td>
<td>Arthralgia, muscle spasms, muscle tightness, neck pain, pain in extremity</td>
<td>Uncommon</td>
</tr>
<tr>
<td>General disorders and administration site conditions</td>
<td>Pain, pyrexia, rigors</td>
<td>Common</td>
</tr>
<tr>
<td></td>
<td>Chest discomfort, chest pain, chills, fatigue, feeling cold, feeling jittery, influenza like illness, infusion related reaction, infusion site erythema, infusion site pain, infusion site reaction, malaise, peripheral oedema</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Investigations</td>
<td>Body temperature increased</td>
<td>Common</td>
</tr>
<tr>
<td></td>
<td>Blood pressure diastolic decreased, blood pressure increased, blood pressure systolic increased, haemoglobin decreased, heart rate increased</td>
<td>Uncommon</td>
</tr>
</tbody>
</table>

**Description of selected adverse reactions**

The most reported post-marketing ADRs received since the product was authorised for both concentrations were chest pain, flushing, blood pressure increased and decreased, malaise, dyspnoea, nausea, vomiting, pyrexia, back pain, headache and chills.

**Paediatric population**

The safety results for 4 paediatric patients (those ≤ 17 years old) included in the PID study and the results for the 12 children (aged 3 to 16 years old) included in the ITP study were evaluated. It was observed that the proportion of headache, chills, pyrexia, nausea, vomiting, hypotension, heart rate increase and back pain in children was higher than in adults. Cyanosis was reported in one child but not in adults. Assessment of vital signs in clinical trials of the paediatric population did not indicate any pattern of clinically relevant changes.

**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. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

**Overdose**

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

**Paediatric population**

Information on overdose in children has not been established with Flebogamma DIF. However, as in adult population, overdose may lead to fluid overload and hyperviscosity as with any other intravenous immunoglobulins.