Package leaflet: Information for the user

IQYMUNE 100 mg/mL solution for infusion

Human normal immunoglobulin (IVIg)

▼This medicine is subject to additional monitoring. This will allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

Read all of this leaflet carefully before you start using this medicine because it contains important information for you.
- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

1. WHAT IQYMUNE IS AND WHAT IT IS USED FOR

What IQYMUNE is
This medicine contains antibodies. It belongs to the class of medicines called immunoglobulins. These medicines contain human antibodies, produced by our immune system.

How IQYMUNE works
- The human antibodies contained in this medicine allow your body to fight infections or to balance your immune system.
- If you do not have enough antibodies, the antibodies provided in this medicine can replace the missing antibodies. As IQYMUNE antibodies have been isolated from human plasma they act exactly as if they were your own antibodies.
- This type of medicine can also be used if your immune system is out of balance and if you need additional antibodies in some inflammatory disorders (auto-immune disease). This medicine provides these antibodies to you.

What IQYMUNE is used for
This medicine is used for :

The treatment of patients who do not have sufficient antibodies (replacement therapy). There are two groups:
1. Patientsborn with lack of antibody production (primary immunodeficiency syndromes).
2. Patients with an acquired deficiency of antibodies (secondary immunodeficiency) due to specific diseases and/or treatments and experiencing severe or recurrent infections

The treatment of patients with certain inflammatory disorders (immunomodulation). There are five groups:
1. Patients who do not have enough blood platelets (primary immune thrombocytopenia, ITP), and who are at high risk of bleeding or will have surgery in the near future.
2. Patients with a disease that is associated with multiple inflammations of the nerves in the whole body (Guillain Barré syndrome).
3. Patients with a disease which results in multiple inflammations of several organs of the body (Kawasaki disease). IQYMUNE should be administered in combination with acetylsalicylic acid.
4. Patients who suffer from an inflammation of peripheral nerves that causes muscle weakness and/or numbness mainly in the arms or legs (chronic inflammatory demyelinating polyradiculoneuropathy, CIDP).
5. Patients who suffer from a rare condition characterized by slowly progressive and asymmetrical muscle weakness of the arms and legs without sensory loss (multifocal motor neuropathy, MMN).

2. WHAT YOU NEED TO KNOW BEFORE YOU USE IQYMUNE

Do not use IQYMUNE
If you are allergic to immunoglobulins or to any of the other ingredients of this medicine (listed in section 6).
For example, if you have an immunoglobulin A deficiency, you may have antibodies against immunoglobulin A in your blood. Since this medicine contains trace amounts of immunoglobulin A, you might get an allergic reaction.

Warnings and precautions
Talk to your doctor, pharmacist or nurse before using IQYMUNE.

White blood cells
A transient decrease in the number of certain white blood cells (leukopenia/neutropenia) is common. Usually, it occurs within hours or days after the infusion and resolves spontaneously within 7 to 14 days.
Before using this medicine, you should tell the doctor when you know you have:
- a low number of white blood cells, or
- you take a medicine which could decrease the number of white blood cells.

Aseptic meningitis syndrome

Aseptic meningitis syndrome (reversible and non-infectious) has been reported to occur with immunoglobulin treatment such as IQYMUNE. The syndrome usually begins within several hours to 2 days following the treatment and may occur with the following symptoms: fever, headache, stiff neck, nausea, vomiting.
Aseptic meningitis may occur more frequently in association with high-dose (2 g/kg) of immunoglobulin treatment such as IQYMUNE.

If you experience such symptoms, please check with your health care provider for a thorough neurological examination, to rule out other causes of meningitis.

Discontinuation of treatment has resulted in remission of aseptic meningitis within few days without sequelae.

Haemolytic anaemia/Haemolysis

Haemolytic anaemia (transient decrease of red blood cells, due to their destruction) can develop subsequently to immunoglobulin therapy such as IQYMUNE, particularly if you are of blood group A, B or AB.
Reversible haemolytic anaemia may be characterized by the following symptoms: pallor, fatigue, weakness, jaundice, dark urine. If you receive immunoglobulins such as IQYMUNE, you should be monitored for clinical signs and symptoms of haemolysis.

Transfusion related acute lung injury (TRALI)
In patients receiving immunoglobulin such as IQYMUNE, there have been rare cases of Transfusion Related Acute Lung Injury (TRALI). This disease is characterized by decrease of oxygen level in the body (hypoxemia), difficulties in breathing (dyspnoea), increase of the respiratory rate (tachypnoea), blueing skin (cyanosis), fever and decrease of the blood pressure (hypotension). Symptoms of TRALI typically appear during the infusion of immunoglobulin or within 6 hours following the infusion. Therefore, if you notice any such reactions during IQYMUNE infusion, tell your doctor immediately. He/she will decide whether the infusion rate should be decreased or whether the infusion should be stopped.

Dosing adjustment
The doctor will adjust the dosage regimen of IQYMUNE and the infusion rate depending on your disease but also depending on your body weight, your state of health (hydration, kidney function, other concomitant diseases, potential side effects) and other medicines which you are taking. Please inform your doctor of all medicines taken and diseases which you have or have had.

Monitoring during administration of IQYMUNE
In order to avoid a risk of a reaction the doctor will check the infusion rate and adjust it so it is suitable for you. During the infusion your doctor will put in place medical monitoring in order to detect any signs of allergy or any other reactions.

To avoid any risk of reaction, IQYMUNE will be administered to you slowly for the first 30 minutes and you will need to remain under the supervision of a doctor or a nurse:
- throughout all the infusion and for at least one hour after the infusion if your doctor decides to use a high infusion rate, if you have a small amount of antibodies in your blood, if you have never previously received this medicine or if the last infusion was administered a long time ago,
- throughout all the infusion and for at least 20 minutes after the infusion if you have recently received this medicine.

If an allergy develops you will recognize the initial signs by dizziness, swelling of the face/legs, shortness of breath, spots on the skin and/or itching. In this situation you must call your doctor or nurse immediately.

Depending on your allergic reaction the doctor may decide to reduce the rate of your infusion or to stop it. He/she may also start treatment for the allergy if he/she considers this to be necessary.

If you have any doubt, please do not hesitate to ask your doctor or your nurse for advice.

Special patient groups
This medicine may very rarely cause or worsen a kidney disease (acute kidney failure) or a disease of the heart and blood vessels (myocardial infarction, cerebrovascular accident (including stroke), pulmonary embolism or deep venous thrombosis). Patients who are already suffering from a disease or who have certain risk factors must take care when using this medicine.

Because of this your doctor will monitor your kidneys and/or your heart and your blood vessels:
- if you already have a kidney disease (renal failure),
- if you are taking certain medicines which may be dangerous for your kidneys,
- if you have a high level of sugar in your blood (diabetes),
- if you have an insufficient volume of blood in your body (hypovolemia),

- if your weight is too high (obesity),
- if you are over 65 years old,
- if you already have a disease of the heart or blood vessels,
- if you have high blood pressure (arterial hypertension),
- if you are at risk of being immobilised for a long period of time,
- if you are suffering from a disease which causes an increase of your blood thickening (hyperviscous blood).

If you have any of the above predisposing factors, the doctor will adjust the dose and infusion rate at which IQYMUNE, solution for infusion is administered.

Information on safety with respect to infections
This medicine is made from human blood plasma (this is the liquid part of the blood).
When medicines are made from human blood or plasma, certain measures are put in place to prevent infections being passed on to patients. These include:
- careful selection of blood and plasma donors to make sure those at risk of carrying infections are excluded,
- the testing of each donation and pools of plasma for signs of virus/infections,
- the inclusion of steps in the processing of the blood or plasma that can inactivate or remove viruses.

Despite these measures, when medicines prepared from human blood or plasma are administered, the possibility of passing on infection cannot be totally excluded. This also applies to any unknown or emerging viruses and other types of infections.
The measures taken are considered effective for viruses such as human immunodeficiency virus (HIV), hepatitis B virus, hepatitis C virus, hepatitis A virus and parvovirus B19.
Immunoglobulins have not been associated with hepatitis A or parvovirus B19 infections, possibly because antibodies against these infections, which are contained in the product, are protective.
It is strongly recommended that every time you are given a dose of IQYMUNE the name and batch number of the product are recorded in order to maintain a record of the batches used.

Other medicines and IQYMUNE
Tell your doctor or pharmacist if you are using, have recently used or might use any other medicines.

Effects on vaccines
The use of immunoglobulins such as IQYMUNE may reduce the effectiveness of vaccines against measles, rubella, mumps and/or varicella for 3 months. It is recommended that a period of 3 months elapse between the last administration of immunoglobulins and administration of these vaccines. It may be necessary to wait for 1 year after the last administration of immunoglobulins for the measles vaccine. Before you are vaccinated by your doctor, please tell him/her that you are being treated with IQYMUNE.

Loop diuretics

Avoidance of concomitant use of certain medicines that can harm your kidneys (loop diuretics).

Effects on blood tests
Some antibodies contained in IQYMUNE may invalidate the results of certain blood tests (serological tests). If your doctor or the person who is taking your blood sample does not know that you have received IQYMUNE, please tell him/her before having this blood test.

Pregnancy, breast-feeding and fertility
- If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking this medicine.
- No reproduction studies have been performed with IQYMUNE in animals and experience in pregnant women is limited. Although no harmful effect has been reported on the foetus, IQYMUNE should not be administered to pregnant women unless the need for treatment has been clearly established.
- The antibodies contained in IQYMUNE are excreted in human milk and may contribute to protecting your baby from certain infections.

Driving and using machines
Patients may experience reactions (for example dizziness or nausea) during the treatment with IQYMUNE which might affect the ability to drive and use machines. If this happens, you should not drive or use machines until these effects have disappeared.

IQYMUNE contains sodium
This medicinal product contains less than 1 mmol sodium (23 mg) per dose, which means it is essentially “sodium-free”.

3. HOW TO USE IQYMUNE

This medicine is intended for intravenous administration (infusion into a vein).
It is given to you by your doctor or nurse.
Dose and frequency of the infusion will vary depending on your condition and your body weight.
At the beginning of your infusion you will receive IQYMUNE at a slow rate. Dependent on how comfortable you are, your doctor may then gradually increase the infusion rate.

Use in children and adolescents
The same indications, dose and frequency of infusion as for adults apply for children and adolescents (aged 0 to 18 years-old).

If you use more IQYMUNE than you should
Overdose is very unlikely to occur because this medicine is usually administered under medical supervision. If, in spite of this, you receive more IQYMUNE than you should, your blood may become too thick (hyperviscous). This may happen particularly if you are a patient at risk, for example if you are elderly or if you have problems with your heart or kidneys. Be sure that you take adequate fluids so you are not dehydrated and notify your physician if you are known to have medical problems.

4. POSSIBLE SIDE EFFECTS

Like all medicines, IQYMUNE can cause side effects, although not everybody gets them.

Risk of allergic reactions
Allergic reactions can occur uncommonly. In some cases, these reactions have progressed to a serious allergic reaction.

The warning signs of allergic reactions are:
- swelling of the face or throat,
- feeling of burning and tingling at the infusion site,
- chills,
- redness,
- itching and rash,
- low blood pressure,
- extreme tiredness (lethargy),
- feeling sick (nausea), vomiting,
- restlessness,
- fast heart rate,
- tightness of the chest,
- pins and needles,
- wheezing (asthma-like).

If one of these effects occurs, **alert a doctor** who will, depending on the type and severity of the reaction, **immediately stop the treatment with IQYMUNE and/or** start an appropriate treatment.

Blood clots

Development of blood clots may occur in the blood circulation. It may result in:
- heart attack, the warning signs are sudden chest pain or shortness of breath.
- stroke, the warning signs are sudden onset of muscle weakness, loss of sensation and/or balance, decreased alertness or difficulty in speaking.
- pulmonary embolism, the warning signs are chest pain, difficulty in breathing or coughing up blood.
- clot in a vein (venous thrombosis), the warning signs are redness, feel warmth, pain, tenderness, or have a swelling of one or both legs.

If one of these effects occurs, **alert a doctor who will,** depending on the type and severity of the reaction, **immediately stop the treatment with IQYMUNE and/or** start an appropriate treatment.

The following adverse reactions are common (up to 1 in 10 infusions):
- decreased number of one type of white blood cells (neutropenia) . See also “white blood cells” in section 2.
- headache,
- fever, tiredness (fatigue).

The following adverse reactions are uncommon (up to 1 in 100 infusions):
- decreased number of other types of white blood cells (leukopenia, lymphopenia, monocytopenia),
- dizziness,
- high blood pressure (hypertension)
- nausea, vomiting, abdominal pain
- skin rash, itching (pruritus),
- back pain, joint pain, pain in extremity,
- muscular pain (myalgia),
- malaise, flu-like illness, swellings (oedema peripheral),
- chills
- blood tests revealing changes to kidney functions (creatinine renal clearance decreased,),
- body temperature increased
- blood pressure increased.

The following adverse reactions are rare (up to 1 in 1000 infusions):
- allergic reaction (anaphylactoid reaction),
- inflammation of the layers lining the brain (reversible aseptic meningitis),
- vertigo,
- blood circulatory disorder in extremity (peripheral vascular disorder),
- oral pain,
- pain of skin,
- excessive sweating (hyperhidrosis)
- bone pain
- musculoskeletal chest pain
- cramps (muscle spasms)
- feeling cold
- pain at the infusion site
- infusion related reaction,
- blood tests revealing changes to kidney functions (blood creatinine increased)
- dry throat

The following adverse reactions were not observed with IQYMUNE but were reported with other immunoglobulin preparations:
- sudden fall in blood pressure,
- transient decrease of red blood cells (reversible haemolytic anemia/haemolysis).

- kidney failure
- blood clots (see also the section "blood clots")
- serious allergic reaction even when the patient has shown no allergic reaction to previous administration (see also the section "allergic reactions").
- rare cases of Transfusion Related Acute Lung Injury (TRALI); which is a serious complication that may occur during the infusion of immunoglobulin or within 6 hours following the infusion.

Reporting of side effects
If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly at www.mhra.gov.uk/yellowcard. By reporting side effects, you can help provide more information on the safety of this medicine.

5. HOW TO STORE IQYMUNE

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the outer carton and the vial label after EXP. The expiry date refers to the last day of that month.

Do not use this medicine if you notice that the solution is cloudy or has particles floating within the solution.

Do not store above 25°C. Do not freeze.

Keep the vial in the outer carton in order to protect from light.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

6. CONTENTS OF THE PACK AND OTHER INFORMATION

What IQYMUNE contains

- The active substance of IQYMUNE is human normal immunoglobulin.
- 1 mL of IQYMUNE contains 100 mg of human protein of which at least 95% is immunoglobulin G.
- The other ingredients are: glycine, polysorbate 80 and water for injections.

What IQYMUNE looks like and contents of the pack

IQYMUNE is a solution for infusion in vials of 20 mL, 50 mL, 100 mL or 200 mL.
The solution is clear or slightly opalescent, colourless to pale brown.
Not all pack sizes may be marketed.

Marketing Authorisation Holder and Manufacturer

Marketing Authorisation Holder:
Laboratoire Français du Fractionnement et des Biotechnologies
Tour W, 102 Terrasse Boieldieu 19ème Étage, 92800 Puteaux, FRANCE
Tel: + 33(0) 1 69 82 70 10

Manufacturer:
LFB BIOMEDICAMENTS
59 rue de Trévise
59000 Lille
FRANCE

This medicinal product is authorised in the Member States of the EEA under the following names:
Austria and Germany: IQYMUNE 100 mg/mL Infusionslösung
Belgium : IQYMUNE 100 mg/mL oplossing voor infusie
The Netherlands: IQYMUNE100 mg/mL oplossing voor infusie
Czech Republic: IQYMUNE 100 mg/ml infuzní roztok
Denmark: IQYMUNE 100 mg/mL infusionsvæske, opløsning
Finland: IQYMUNE 100 mg/mL infuusioneste, liuos
Greece: IQYMUNE 100 mg/mL διάλυμα για έγχυση
Hungary: IQYMUNE 100 mg/mL oldatos infúzió
Italy: IQYMUNE 100 mg/mL soluzione per infusione
Luxembourg: IQYMUNE 100 mg/mL solution pour perfusion
Spain: IQYMUNE 100 mg/mL solución para perfusión
Sweden: IQYMUNE 100 mg/mL infusionsvätska, lösning
United Kingdom: IQYMUNE 100 mg/mL solution for infusion

This leaflet was last revised in 02/2022

The following information is intended for healthcare professionals only:

Posology

The dosage recommendations are summarised in the following table:

Indication	Dose	Frequency of injections
Replacement therapy		
Primary immunodeficiency syndromes (PID)	Starting dose: 0.4 - 0.8 g/kg Maintenance dose: 0.2 - 0.8 g/kg	every 3 - 4 weeks
Secondary Immunodeficiencies (as defined in 4.1.) (SID)	0.2 - 0.4 g/kg	every 3 - 4 weeks
<u>Immunomodulation:</u>		
Primary immune thrombocytopenia (ITP)	0.8 - 1 g/kg Or 0.4 g/kg/d	on day 1, possibly repeated once within 3 days for 2 - 5 days
Guillain Barré syndrome	0.4 g /kg/d	for 5 days
Kawasaki disease	2 g/kg	in one dose in association with acetylsalicylic acid
Chronic inflammatory demyelinating polyradiculoneuropathy (CIDP)	Starting dose: 2 g/kg Maintenance dose: 1 g/kg	in divided doses over 2-5 days every 3 weeks over 1-2 days

Multifocal Motor Neuropathy (MMN)	Starting dose: 2 g/kg Maintenance dose: 1 g/kg or 2 g/kg	over 2-5 consecutive days every 2-4 weeks or every 4-8 weeks over 2-5 days

Method of administration
For intravenous use only.
Human normal immunoglobulin should be infused intravenously at an initial rate of 0.5 mL/kg/hr for 30 minutes. If well tolerated, the rate of administration may gradually be increased to a maximum of 6 mL/kg/hr.

Special precautions
- Some side effects may be related to the infusion rate. The recommended infusion rate must be observed. If adverse effects occur the administration rate must be reduced or the infusion stopped. IQYMUNE must be administered at a minimal infusion rate and dose in patients at risk of acute renal failure or thromboembolic reaction.
- It is strongly recommended that every time IQYMUNE 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.

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

Instructions for handling and disposal
The solution must be inspected visually before administration. The solution must be clear or slightly opalescent, colourless to pale brown. Do not use a solution which is cloudy or contains a deposit.

Any unused product or waste material should be disposed of in accordance with local requirements.