Appendix 5 : PATIENT INFORMATION LEAFLET [Novartis]

(See next page)
Package leaflet: Information for the user

Xolair 75 mg solution for injection
Omalizumab

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.
- 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 Xolair is and what it is used for
2. What you need to know before you are given Xolair
3. How Xolair is given
4. Possible side effects
5. How to store Xolair
6. Contents of the pack and other information

1. What Xolair is and what it is used for

The active substance of Xolair is omalizumab. Omalizumab is a man-made protein that is similar to natural proteins produced by the body; it belongs to a class of medicines called monoclonal antibodies. It is used to prevent asthma from getting worse by controlling symptoms of severe allergic asthma in adults and children (6 years of age and older) who are already receiving asthma medicine, but whose asthma symptoms are not well controlled by medicines such as high-dose steroid inhalers or beta-agonist inhalers.

Xolair works by blocking a substance called immunoglobulin E (IgE), which is produced by the body. IgE plays a key role in causing allergic asthma.

2. What you need to know before you are given Xolair

You should not be given Xolair
- if you are allergic to omalizumab or any of the other ingredients of this medicine (listed in section 6).

If you think you may be allergic to any of the ingredients, tell your doctor as you should not be given Xolair.

Warnings and precautions
Xolair contains a protein, and proteins can cause serious allergic reactions in some people. Signs include rash, difficulty in breathing, swelling or feeling faint. If you have an allergic reaction after taking Xolair, contact a doctor as soon as you can.

A certain type of allergic reaction called serum sickness has been observed in patients treated with Xolair. The symptoms of serum sickness can be one or more of the following symptoms: joint pain with or without swelling or stiffness, rash, fever, swollen lymph nodes, muscle pain. If you experience any of these symptoms, or in particular if you experience a combination of such symptoms, contact your doctor immediately.

Churg-Strauss and Hypereosinophilic syndrome have been observed in patients treated with Xolair. The symptoms may include one or more of the following: swelling, pain or rash around blood or lymph vessels, high level of a specific type of white blood cells (marked eosinophilia), worsening problems with breathing, nasal congestion, heart problems, pain, numbness, tingling in the arm and
legs. If you experience any of these symptoms, or in particular if you experience a combination of such symptoms, contact your doctor immediately.

Talk to your doctor before you are given Xolair:
- If you have kidney or liver problems.
- If you have a disorder where your own immune system attacks parts of your own body (autoimmune disease).
- If you live in a region where infections caused by parasites are common or if you are travelling to such a region as Xolair may weaken your resistance to such infections.

Xolair does not treat acute asthma symptoms, such as a sudden asthma attack. Therefore Xolair should not be used to treat such symptoms.

Xolair is not meant to prevent or treat other allergy-type conditions, such as sudden allergic reactions, hyperimmunoglobulin E syndrome (an inherited immune disorder), aspergillosis (a fungus-related lung disease), food allergy, eczema or hay fever.

Children (under 6 years of age)
Xolair should not be given to children under 6 years of age. There are not enough data in this group.

Other medicines and Xolair
Tell your doctor, pharmacist or nurse if you are taking, have recently taken or might take any other medicines.

This is especially important if you are taking:
- other medicines to treat an infection caused by a parasite, as Xolair may reduce the effect of your medicines.
- inhaled corticosteroids and other medicines for allergic asthma.

Pregnancy and breast-feeding
You should not be given Xolair when you are pregnant, unless this is considered necessary by your doctor.

If you plan to become pregnant, tell your doctor before starting treatment with Xolair. Your doctor will discuss with you the benefits and potential risks of being given this medicine during pregnancy.

If you become pregnant while being treated with Xolair, tell your doctor immediately.

You should not be given Xolair when you are breast-feeding.

Driving and using machines
It is unlikely that Xolair will affect your ability to drive and use machines.

3. How Xolair is given

Instructions on how to use Xolair are given in the section “Information for the healthcare professional”.

Xolair is given to you by a doctor or nurse as an injection just under the skin (subcutaneously).

Your doctor will work out how much Xolair you need, and how often you will be given it. This depends on your body weight and the results of a blood test carried out before the start of the treatment to measure the amount of IgE in your blood.

Follow carefully all instructions given by your doctor or nurse.
How much you will be given
You will be given 1 to 4 injections at a time, either every two weeks, or every four weeks.

Carry on taking your current asthma medicine during Xolair treatment. Do not stop taking any asthma medicines without talking to your doctor.

You may not see an immediate improvement in your asthma after beginning Xolair therapy. It usually takes between 12 and 16 weeks to have the full effect.

Use in children and adolescents
Xolair can be given to children and adolescents aged 6 years or older, who are already receiving asthma medicine, but whose asthma symptoms are not well controlled by medicines such as high dose steroid inhalers or beta-agonist inhalers. Your doctor will work out how much Xolair your child needs and how often it needs to be given. This will depend on your child’s weight and the results of a blood test carried out before the start of the treatment to measure the amount of IgE in his/her blood.

If a dose of Xolair is missed
Contact your doctor or hospital as soon as possible to re-schedule your appointment.

If you stop treatment with Xolair
Do not stop taking Xolair unless your doctor tells you to. Interrupting or stopping the treatment with Xolair may cause your asthma symptoms to come back.

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.

4. Possible side effects
Like all medicines, this medicine can cause side effects, although not everybody gets them. The side effects caused by Xolair are usually mild to moderate but can occasionally be serious.

Serious side effects include:
Rare side effects (may affect up to 1 in 1,000 people)
• Sudden severe allergic reactions: if you notice any serious sudden signs of allergy or combination of signs such as rash, itching or hives on the skin, swelling of the face, lips, tongue, larynx (voice box), windpipe or other parts of the body, fast heart beat, dizziness and light-headedness, shortness of breath, wheezing or trouble breathing, or any other new symptoms, tell your doctor or nurse immediately.
Not known (frequency cannot be estimated from the available data)
• Development of one or more of the following symptoms: swelling, pain or rash around blood or lymph vessels, high level of a specific type of white blood cells (marked eosinophilia), worsening problems with breathing, nasal congestion, heart problems, pain, numbness, tingling in the arms and legs (signs of so-called “Churg-Strauss syndrome or hypereosinophilic syndrome”).
• Low blood platelet count with symptoms such as bleeding or bruising more easily than normal.
• Development of any of the following symptoms, especially if in combination: joint pain with or without swelling or stiffness, rash, fever, swollen lymph nodes, muscle pain (signs of serum sickness).
If you experience any of these, tell your doctor or nurse straight away.

Other side effects include:
Very common side effects (may affect more than 1 in 10 people)
• fever (in children)

Common side effects (may affect up to 1 in 10 people)
• reactions at the injection site including pain, swelling, itching and redness
• pain in the upper part of the tummy (in children)
• headache (very common in children)

Uncommon side effects (may affect up to 1 in 100 people)
• feeling dizzy, sleepy or tired
• tingling or numbness of the hands or feet
• fainting, low blood pressure while sitting or standing (postural hypotension), flushing
• sore throat, coughing, acute breathing problems
• feeling sick (nausea), diarrhoea, indigestion
• itching, hives, rash, increased sensitivity of the skin to sun
• weight increase
• flu-like symptoms
• swelling arms

Rare side effects (may affect up to 1 in 1,000 people)
• parasitic infection

Not known (frequency cannot be estimated from the available data)
• joint pain, muscle pain and joint swelling
• hair loss

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 (see details below). By reporting side effects you can help provide more information on the safety of this medicine.

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Ireland
IMB Pharmacovigilance
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IRL - Dublin 2
Tel: +353 1 6764971
Fax: +353 1 6762517
Website: www.imb.ie
e-mail: imbpharmacovigilance@imb.ie

Malta
ADR Reporting
The Medicines Authority
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GZR-1368 Gżira
Website: www.medicinesauthority.gov.mt
e-mail: postlicensing.medicinesauthority@gov.mt

5. How to store Xolair

- 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 label. The expiry date refers to the last day of that month.
- Store in the original package in order to protect from light.
- Store in a refrigerator (2°C – 8°C). Do not freeze.
- Do not use any pack that is damaged or shows signs of tampering.
6. Contents of the pack and other information

**What Xolair contains**
- The active substance is omalizumab. One syringe of 0.5 ml solution contains 75 mg omalizumab.
- The other ingredients are L-arginine hydrochloride, L-histidine hydrochloride, L-histidine, Polysorbate 20 and water for injections.

**What Xolair looks like and contents of the pack**
Xolair solution for injection is supplied as a clear to opalescent, slightly yellow to brown solution in a pre-filled syringe.

Xolair 75 mg solution for injection is available in packs containing 1 pre-filled syringe and in multipacks comprising 4 or 10 intermediate packs, each containing 1 pre-filled syringe.

Not all pack sizes may be marketed in your country.

**Marketing Authorisation Holder**
Novartis Euorpharm Limited
Wimbledon Road
Horspath
West Sussex, RH12 5AB
United Kingdom

**Manufacturer**
Novartis Pharma GmbH
Roonstrasse 25
D-90429 Nuremberg
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For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

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Tel: +372 66 30 810

**Norge**
Novartis Norge AS
Tlf: +47 23 05 20 00
Package leaflet: Information for the user

Xolair 150 mg solution for injection
Omalizumab

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.
- 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 Xolair is and what it is used for
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4. Possible side effects
5. How to store Xolair
6. Contents of the pack and other information

1. What Xolair is and what it is used for

Xolair is used for the treatment of allergic asthma and chronic spontaneous urticaria (CSU). The active substance of Xolair is omalizumab. Omalizumab is a man-made protein that is similar to natural proteins produced by the body; it belongs to a class of medicines called monoclonal antibodies. Xolair works by blocking a substance called immunoglobulin E (IgE), which is produced by the body. IgE plays a key role in causing allergic asthma or CSU.

Allergic asthma
This medicine is used to prevent asthma from getting worse by controlling symptoms of severe allergic asthma in adults and children (6 years of age and older) who are already receiving asthma medicine, but whose asthma symptoms are not well controlled by medicines such as high-dose steroid inhalers or beta-agonist inhalers.

Chronic spontaneous urticaria (CSU)
This medicine is used to treat chronic spontaneous urticaria in adults and adolescents (12 years of age or older) who are already receiving antihistamines but whose CSU symptoms are not well controlled by these medicines.

2. What you need to know before you are given Xolair

You should not be given Xolair

- if you are allergic to omalizumab or any of the other ingredients of this medicine (listed in section 6).

If you think you may be allergic to any of the ingredients, tell your doctor as you should not be given Xolair.

Warnings and precautions
Xolair contains a protein, and proteins can cause serious allergic reactions in some people. Signs include rash, difficulty in breathing, swelling or feeling faint. If you have an allergic reaction after taking Xolair, contact a doctor as soon as you can.

A certain type of allergic reaction called serum sickness has been observed in patients treated with Xolair. The symptoms of serum sickness can be one or more of the following symptoms: joint pain with or without swelling or stiffness, rash, fever, swollen lymph nodes, muscle pain. If you experience
any of these symptoms, or in particular if you experience a combination of such symptoms, contact your doctor immediately.

Churg-Strauss and Hypereosinophilic syndrome have been observed in allergic asthma patients treated with Xolair. The symptoms may include one or more of the following: swelling, pain or rash around blood or lymph vessels, high level of a specific type of white blood cells (marked eosinophilia), worsening problems with breathing, nasal congestion, heart problems, pain, numbness, tingling in the arm and legs. If you experience any of these symptoms, or in particular if you experience a combination of such symptoms, contact your doctor immediately.

Talk to your doctor before you are given Xolair:
- If you have kidney or liver problems.
- If you have a disorder where your own immune system attacks parts of your own body (autoimmune disease).
- If you live in a region where infections caused by parasites are common or if you are travelling to such a region as Xolair may weaken your resistance to such infections.

Xolair does not treat acute asthma symptoms, such as a sudden asthma attack. Therefore Xolair should not be used to treat such symptoms.

Xolair is not meant to prevent or treat other allergy-type conditions, such as sudden allergic reactions, hyperimmunoglobulin E syndrome (an inherited immune disorder), aspergillosis (a fungus-related lung disease), food allergy, eczema or hay fever.

Children and adolescents

Allergic asthma
Xolair is not recommended for children under 6 years of age.

Chronic spontaneous urticaria (CSU)
Do not give Xolair to children under 12 years of age. Its use in children under 12 has not been studied.

Other medicines and Xolair
Tell your doctor, pharmacist or nurse if you are taking, have recently taken or might take any other medicines.

This is especially important if you are taking:
- medicines to treat an infection caused by a parasite, as Xolair may reduce the effect of your medicines,
- inhaled corticosteroids and other medicines for allergic asthma.

Pregnancy and breast-feeding
You should not be given Xolair when you are pregnant, unless this is considered necessary by your doctor.

If you plan to become pregnant, tell your doctor before starting treatment with Xolair. Your doctor will discuss with you the benefits and potential risks of being given this medicine during pregnancy.

If you become pregnant while being treated with Xolair, tell your doctor immediately.

You should not be given Xolair when you are breast-feeding.

Driving and using machines
It is unlikely that Xolair will affect your ability to drive and use machines.
3. How Xolair is given

Instructions on how to use Xolair are given in the section “Information for the healthcare professional”.

Xolair is given to you by a doctor or nurse as an injection just under the skin (subcutaneously).

Follow carefully all instructions given by your doctor or nurse.

How much you will be given

**Allergic asthma**

Your doctor will work out how much Xolair you need and how often you will be given it. This depends on your body weight and the results of a blood test carried out before the start of the treatment to measure the amount of IgE in your blood.

You will be given 1 to 4 injections at a time, either every two weeks, or every four weeks.

Carry on taking your current asthma medicine during Xolair treatment. Do not stop taking any asthma medicines without talking to your doctor.

You may not see an immediate improvement in your asthma after beginning Xolair therapy. It usually takes between 12 and 16 weeks to have the full effect.

**Chronic spontaneous urticaria (CSU)**

You will be given two 150 mg injections at a time every four weeks.

Continue taking your current medicine for CSU during Xolair treatment. Do not stop taking any medicine without talking to your doctor first.

Use in children and adolescents

**Allergic asthma**

Xolair can be given to children and adolescents aged 6 years or older, who are already receiving asthma medicine, but whose asthma symptoms are not well controlled by medicines such as high dose steroid inhalers or beta-agonist inhalers. Your doctor will work out how much Xolair your child needs and how often it needs to be given. This will depend on your child’s weight and the results of a blood test carried out before the start of the treatment to measure the amount of IgE in his/her blood.

**Chronic spontaneous urticaria (CSU)**

Xolair can be given to adolescents aged 12 years or older, who are already receiving antihistamines but whose CSU symptoms are not well controlled by these medicines.

If a dose of Xolair is missed

Contact your doctor or hospital as soon as possible to re-schedule your appointment.

If you stop treatment with Xolair

Do not stop taking Xolair unless your doctor tells you to. Interrupting or stopping the treatment with Xolair may cause your asthma or CSU symptoms to come back.

However, if you are being treated for CSU, your doctor may stop Xolair treatment from time to time so that your symptoms can be assessed. Follow your doctor’s instructions.

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.
4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them. The side effects caused by Xolair are usually mild to moderate but can occasionally be serious.

Serious side effects include:
Rare side effects (may affect up to 1 in 1,000 people)
- Sudden severe allergic reactions: if you notice any serious sudden signs of allergy or combination of signs such as rash, itching or hives on the skin, swelling of the face, lips, tongue, larynx (voice box), windpipe or other parts of the body, fast heart beat, dizziness and light-headedness, shortness of breath, wheezing or trouble breathing, or any other new symptoms, tell your doctor or nurse immediately.
Not known (frequency cannot be estimated from the available data)
- Development of one or more of the following symptoms: swelling, pain or rash around blood or lymph vessels, high level of a specific type of white blood cells (marked eosinophilia), worsening problems with breathing, nasal congestion, heart problems, pain, numbness, tingling in the arms and legs (signs of so-called “Churg-Strauss syndrome or hypereosinophilic syndrome”).
- Low blood platelet count with symptoms such as bleeding or bruising more easily than normal.
- Development of any of the following symptoms, especially if in combination: joint pain with or without swelling or stiffness, rash, fever, swollen lymph nodes, muscle pain (signs of serum sickness).

If you experience any of these, tell your doctor or nurse straight away.

Other side effects include:
Very common side effects (may affect more than 1 in 10 people)
- fever (in children)

Common side effects (may affect up to 1 in 10 people)
- reactions at the injection site including pain, swelling, itching and redness
- pain in the upper part of the tummy (in children)
- headache (very common in children)
- upper respiratory tract infection, such as inflammation of the pharynx and common cold
- feeling of pressure or pain in the cheeks and forehead (sinusitis, sinus headache)
- pain in joints (arthralgia)

Uncommon side effects (may affect up to 1 in 100 people)
- feeling dizzy, sleepy or tired
- tingling or numbness of the hands or feet
- fainting, low blood pressure while sitting or standing (postural hypotension), flushing
- sore throat, coughing, acute breathing problems
- feeling sick (nausea), diarrhoea, indigestion
- itching, hives, rash, increased sensitivity of the skin to sun
- weight increase
- flu-like symptoms
- swelling arms

Rare side effects (may affect up to 1 in 1,000 people)
- parasitic infection

Not known (frequency cannot be estimated from the available data)
- muscle pain and joint swelling
- hair loss

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 (see details below). By reporting side effects you can help provide more information on the safety of this medicine.

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<td>IRL - Dublin 2</td>
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<td>203 Level 3, Rue D'Argens</td>
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|                      | medicinesauthority@gov.mt               |

5. **How to store Xolair**

- 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 label. The expiry date refers to the last day of that month.
- Store in the original package in order to protect from light.
- Store in a refrigerator (2°C – 8°C). Do not freeze.
- Do not use any pack that is damaged or shows signs of tampering.

6. **Contents of the pack and other information**

**What Xolair contains**
- The active substance is omalizumab. One syringe of 1 ml solution contains 150 mg omalizumab.
- The other ingredients are L-arginine hydrochloride, L-histidine hydrochloride, L-histidine, Polysorbate 20 and water for injections.

**What Xolair looks like and contents of the pack**
Xolair solution for injection is supplied as a clear to opalescent, slightly yellow to brown solution in a pre-filled syringe.

Xolair 150 mg solution for injection is available in packs containing 1 pre-filled syringe and in multipacks comprising 4 or 10 intermediate packs, each containing 1 pre-filled syringe.

Not all pack sizes may be marketed in your country.

**Marketing Authorisation Holder**
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Wimbledon Road
Horsham
West Sussex, RH12 5AB
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This was last revised in February 2014. For detailed information you can view the European Medicines Agency Website at [http://www.ema.europa.eu](http://www.ema.europa.eu)
EMA/78726/2014