

Immunoglobulin replacement therapy

This page is about immunoglobulins (antibodies). Some people with lymphoma need an infusion of immunoglobulins to strengthen their immune system if their own antibody levels are low. People with chronic lymphocytic leukaemia (CLL) or who have had an allogeneic (donor) stem cell transplant are most likely to have this treatment.

On this page

[What is immunoglobulin replacement therapy?](#)

[Who might need it?](#)

[Having immunoglobulin replacement therapy](#)

[Side effects](#)

[After therapy](#)

[Is it safe?](#)

What is immunoglobulin replacement therapy?

Immunoglobulin is another name for an antibody. Antibodies are proteins that occur naturally in your body to help you fight infection. Immunoglobulin replacement therapy is treatment given to boost your antibody levels when they are low. You have one or more **infusions** containing a mixture of antibodies from a donor (someone else). This treatment can strengthen your **immune system** and help you fight infection.

Who might need immunoglobulin replacement therapy?

Most people with lymphoma do not need immunoglobulin replacement therapy.

Immunoglobulin replacement therapy might be considered when:

- your blood antibody levels are low, and
- you have had severe or repeated infections.

This is most likely to happen:

- if you have **chronic lymphocytic leukaemia (CLL)**
- after an **allogeneic stem cell transplant** where you have donor stem cells (from someone else).

People with other **types of lymphoma** might need immunoglobulin replacement therapy but this is less common.

The levels of antibodies in your blood are monitored by **blood tests**. You are usually given other treatments to reduce your risk of infection, for example, antibiotics and **steroids**.

Immunoglobulin replacement therapy might be considered if you still have problems with infection despite these other treatments. Your **medical team** can discuss whether immunoglobulin replacement therapy would be beneficial for you. They can give you more information about this treatment if they recommend it.

What is the process for having immunoglobulin replacement therapy?

Most people who need immunoglobulin replacement therapy have the procedure as an outpatient. You do not usually have to stay in hospital overnight unless you are already an inpatient.

Immunoglobulins are usually given as an intravenous infusion (by a drip into a vein). This is called '**intravenous immunoglobulin therapy**' (IVIG). The length of time it takes to have the infusion depends on how much immunoglobulin you need and other factors like your weight. It usually takes a few hours to have the infusion. The first treatment might be given slowly to reduce the risk of **side effects**.

Some people have immunoglobulin replacement therapy as an injection under the skin. This is called '**subcutaneous immunoglobulin therapy**' (SCIG). The needle is attached to a pump so the immunoglobulins can flow slowly into your body. It can take up to 90 minutes to give immunoglobulins by subcutaneous injection. SCIG can be given in hospital or it may be possible for you to give the injections yourself at home after training by your medical team. Some people have more frequent injections of small doses of immunoglobulins given by syringe at home after training. These injections are given over around 2 minutes, usually around 5 times per week.

For hospital treatments, you can usually go home soon after the treatment has been given.

What side effects should I expect?

Serious **side effects** are very rare. Most people do not have many side effects. Side effects are usually mild and temporary. The risk of side effects varies depending on your individual circumstances, how much immunoglobulin you are given and by what method the immunoglobulins are given.

The most common possible side effects are:

- flu-like symptoms, eg fever, shivers
- headache
- digestive problems, such as **nausea, vomiting** and **diarrhoea**
- **fatigue** (extreme tiredness)
- pain and swelling at the site (area) of the injection.

You might have side effects with any immunoglobulin treatment but they are most common with the first treatment. You are monitored carefully while the treatment is being given.

If you feel unwell during or shortly after having your immunoglobulin replacement therapy, tell the nurses straightaway. They can slow down or stop the infusion or give you treatments such as paracetamol and antihistamines.

Side effects are less common with subcutaneous immunoglobulin treatments as lower amounts of immunoglobulin are given.

What happens after immunoglobulin replacement therapy?

Your antibody levels are monitored by **blood tests**. The donor antibodies do not last long in your body so you have to have repeated treatments while your antibody levels are low.

- If you have the **treatment intravenously**, it is usually given once every 3–4 weeks.
- If you have the **treatment subcutaneously**, it is usually given once a week. Some people have more frequent treatments.

It is not possible to give large doses of antibodies subcutaneously so you have to have the treatment more frequently if you have it in this way.

Is immunoglobulin replacement therapy safe?

Immunoglobulin is prepared from blood that has been donated by volunteers. Great care is taken to make sure the therapy is as safe as possible. The donors are carefully screened and the donations are checked, filtered and treated to make sure they don't carry infections (for example HIV). The antibodies are carefully separated from the other parts of the blood to make sure the immunoglobulin replacement therapy contains a wide range of antibodies to help you fight infection.

Reactions are rare and usually mild.

References

These are some of the sources we used to prepare this information. The full list of sources is available on request. Please contact us by email at publications@lymphoma-action.org.uk or phone on **01296 619409** if you would like a copy.

- Department of Health. Clinical guideline for immunoglobulin use (second edition). Available at: bit.ly/2zOVvmG (Accessed October 2017).
- Electronic Medicines Compendium. Available at: bit.ly/2pjWXWX (Accessed October 2017).
- NHS Blood and Transplant. How blood is used. Available at: bit.ly/2i0NzDD (Accessed October 2017).

Further reading

- Blood tests
- Chronic lymphocytic leukaemia (CLL)
- Donor (allogeneic) stem cell transplants
- Glossary
- The immune system

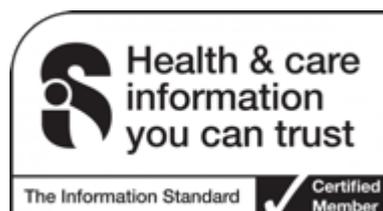
Acknowledgements

- We would like to thank the Expert Reviewers and members of our Reader Panel who gave their time to review this information.

Content last reviewed: December 2017

Updated: April 2018

Next planned review: December 2020



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