TOFACITINIB
is used to treat rheumatoid arthritis and psoriatic arthritis
**Introduction**

Tofacitinib is used to treat rheumatoid arthritis. It can reduce symptoms such as pain and swelling and slow down joint damage. It may also be used to treat psoriatic arthritis.

**What is tofacitinib and how is it used?**

Tofacitinib, also known as Xeljanz, is a type of drug known as a Janus kinase (JAK) inhibitor. It works by blocking the action of Janus kinase enzymes, which are involved in the inflammation that causes the symptoms of rheumatoid arthritis and psoriatic arthritis.

Tofacitinib is a long-term treatment. Most people who benefit from this treatment will notice an improvement within the first 12 weeks of starting treatment.

**Is tofacitinib suitable for me?**

Tofacitinib can be prescribed by a consultant rheumatologist for adults with rheumatoid arthritis or psoriatic arthritis. It can be used alone or with methotrexate.

Tofacitinib won't be started if:

- your arthritis isn’t active
- you haven’t tried other treatments appropriate for your condition first.

Your doctor may decide not to prescribe this treatment if you’re pregnant, planning to try for a baby, or breastfeeding, or if you are over 65. They may also not prescribe it if you have or have had:

- an active infection
- repeated or serious previous infections

- shingles
- disease of the lungs, liver or kidneys
- heart problems, high blood pressure, high cholesterol or blood clots (deep vein thrombosis or pulmonary embolism)
- cancer.

Tofacitinib contains lactose, so you should tell your rheumatology team if you’re lactose intolerant.

You’ll have blood tests before treatment starts to assess your condition and whether the drug is suitable for you. Your rheumatology team will also monitor you through blood tests once you start treatment. If your red or white blood cell count gets too low, your treatment may be stopped until it improves.

Your doctor will need to check if you’ve previously been exposed to tuberculosis (TB). Even if you don’t have symptoms, the bacteria that cause TB may still be present in the body and you may need a course of treatment for this before starting tofacitinib.

If you’ve previously had hepatitis you may need regular checks for this as tofacitinib may increase the risk of hepatitis coming back.

You may have to be monitored for other conditions as well, for example if you have liver problems, high cholesterol, or if you are at risk of heart or lung conditions. Tofacitinib raises cholesterol levels in some people.
When and how do I take tofacitinib?

Tofacitinib is taken as tablets that can be taken with or without food. The usual dose is two tablets a day – one in the morning and one in the evening. But your doctor may suggest taking just one tablet a day.

If you take more than the recommended dose by mistake, contact your doctor straight away. If you miss a dose, carry on with the usual dose the next day – don’t double it.

If you haven’t noticed any improvement in your symptoms after six months, discuss it with your doctor, who may decide to stop the tofacitinib and try another treatment.

Because it’s a long-term treatment, it’s important to keep taking tofacitinib, unless you have severe side effects, even if it doesn’t seem to be working at first. It’s important to carry on taking it even when your symptoms improve, to help keep your condition under control.

Possible risks and side effects

Like any medicine, tofacitinib can cause side effects. The most common ones, headaches and diarrhoea, aren’t usually serious and should soon pass. Feeling sick is fairly common when taking tofacitinib but may settle with time.

Because tofacitinib affects your immune system, it can make you more likely to pick up infections. These aren’t usually serious and include throat, nose and chest infections, cold sores, urinary tract infections and stomach upsets. Some people may have more serious infections including shingles and skin infections, known as cellulitis.

Tell your doctor or rheumatology nurse straight away if you develop any signs of infection such as a sore throat or persistent cough, fever or chills, or any other new symptoms that concern you. If any of these symptoms are severe, you should stop taking tofacitinib and see your doctor straight away.

You should also see your doctor or rheumatology nurse if you develop chickenpox or shingles or come into contact with someone who has chickenpox or shingles. These may be more severe if you’re on tofacitinib. You may need treatment, and you may need to stop taking tofacitinib until you’re better.

Some people who take tofacitinib may have a reduced white blood cell count, raised cholesterol or raised levels of liver enzymes. These problems are usually mild, but your rheumatology team will arrange regular blood checks while you are taking tofacitinib as a precaution.

It is possible that tofacitinib may increase the risk of blood clots, called deep vein thrombosis. These can sometimes move to the lungs, which is called pulmonary embolism. The risk is likely to be greater if you’ve had either of these before. You should seek urgent medical care if you develop swelling of the legs or breathlessness.

It’s possible that there may be a slightly increased risk of some cancers in people taking tofacitinib – though research so far hasn’t confirmed this. If you’ve had previous cancers, this may affect whether tofacitinib is offered to you as a treatment.
Tofacitinib can sometimes cause stomach or bowel problems. These are more common in people who also take non-steroidal anti-inflammatory drugs (NSAIDs) or corticosteroids. You should also tell your doctor straight away if you notice any signs of stomach or abdominal problems, such as pain, a change in bowel habits or blood in your poo.

Rarely, tofacitinib can cause an allergic reaction with sudden swelling, a rash or breathlessness. If you do develop these symptoms, or any other severe symptoms while taking tofacitinib, you should seek medical advice straight away.

**Tips to reduce your risk of infection**

- Try to avoid close contact with people you know have an infection.
- Wash your hands regularly and carry around a small bottle of antibacterial hand gel.
- Keep your mouth clean by brushing your teeth regularly.
- Stop smoking if you're a smoker.
- Make sure your food is stored and prepared properly.
- Try to keep your house clean and hygienic, especially the kitchen, bathrooms and toilets.

**Effects on other treatments**

You’ll probably be taking methotrexate as well as tofacitinib. However, some drugs may interact with tofacitinib, so check with your doctor before starting any new medicines, especially if you’re taking medicines to treat bacterial or fungal infections. And remember to mention you’re on tofacitinib if you’re treated by anyone other than your usual rheumatology team.

You may be more likely to develop a serious infection if you’re taking tofacitinib alongside steroid treatments or other drugs that affect the immune system.

You can carry on taking NSAIDs or painkillers, if needed, unless your doctor advises otherwise.

Don’t take over-the-counter or herbal medicines without discussing it first with your rheumatology team.

**Vaccinations**

It’s best to discuss vaccinations with your doctor and if possible, have any vaccinations you may need before starting tofacitinib.

It’s generally recommended that people on tofacitinib avoid live vaccines. These include measles, mumps and rubella (MMR), tuberculosis (BCG), yellow fever and shingles.

Pneumococcal vaccines, which help to protect against pneumonia, and yearly flu vaccines – except the nasal flu vaccine – are fine and are usually recommended.
Having an operation
If you're thinking about having surgery, talk this over with your healthcare team. They may advise you to stop tofacitinib for a time before and after surgery.

Alcohol
There’s no known interaction between tofacitinib and alcohol, so it’s fine to have a drink if you’re taking this medication.

Government guidelines say both men and women should have no more than 14 units of alcohol a week. You should try to spread these out evenly throughout the course of the week. This is equivalent to about six glasses of wine or six pints of beer.

You can find out more about units of alcohol at www.drinkaware.co.uk

Fertility, pregnancy and breastfeeding
At present, we know very little about the effects of tofacitinib in pregnancy. To be on the safe side, tofacitinib isn’t recommended if you’re pregnant or planning a pregnancy. If you could become pregnant, you should use effective contraception while being treated with tofacitinib and for at least four weeks after stopping the treatment.

It’s not yet known whether tofacitinib passes into breastmilk, so breastfeeding isn’t generally recommended if you’re on tofacitinib.

There’s currently no information on whether tofacitinib might affect male or female fertility.

This leaflet is a guide to tofacitinib, its benefits and potential side effects. If there’s anything else you’d like to know about this drug, just ask the healthcare professionals in charge of your care.

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