

Tofacitinib

Tofacitinib is a medication originally developed to treat rheumatoid arthritis and psoriasis that is now being used to treat alopecia areata / totalis / universalis.



What is Tofacitinib?

Tofacitinib is a medication originally developed to treat rheumatoid arthritis, psoriasis and ulcerative colitis that is now being used to treat alopecia areata, alopecia totalis and alopecia universalis.

How does it work?

Tofacitinib is an anti-inflammatory tablet. It works by blocking the body's production of enzymes called Janus kinases (JAKs) and is called a JAK inhibitor. JAK enzymes are involved in the development of alopecia and interrupting these pathways is a way of treating alopecia.

How effective is tofacitinib for alopecia?

Everyone responds differently to tofacitinib. Some may see a response in the first month with fine and pale regrowth while other may only see results more slowly (6-12 months). The response may be imperfect initially, requiring your doctor to adjust your dosage. By 6-12 months tofacitinib has been shown to regrow about 50% of hair in up to 75% of patients.

Some patients are very slow responders and additional medications may need to be combined with tofacitinib to regrow hair.

How will I be monitored on Tofacitinib?

Prior to commencing tofacitinib you will need to have baseline bloods tests. These tests include routine checks of your cholesterol level, kidneys and liver function and blood count. You will also need a blood test to check for previous exposure to tuberculosis, hepatitis B & C and HIV as tofacitinib may increase the risk of reactivation of these infections.

Some of these blood tests will need to be repeated at regular intervals. Your doctor will advise the exact frequency and provide you with the paperwork to have these performed.

What are the side effects?

All medicines can have side effects and any concerns should be voiced to your prescribing doctor or GP. Studies so far have not shown any severe side effects on tofacitinib as it is very well tolerated.

Tofacitinib can lower the immune system's ability to fight infection. The most common side effects on treatment are therefore infections- specifically upper respiratory tract and skin infections.

Other reported side effects, even though they are not frequently seen, can include sore throat, runny nose, sinusitis, headache, dizziness, cough, stomach pain, indigestion, nausea vomiting, diarrhoea, constipation, muscle or joint aches, flu, cold sores, shingles and insomnia. Most of these symptoms or side effects are easily treated or transient and reverse spontaneously or on withdrawal of tofacitinib.

Please let your doctor know immediately if you are unwell and for any medical emergency or severe side effects please attend your local emergency department urgently.

What age group can take tofacitinib?

Dosage Adjustment in the Elderly

No dosage adjustment is required in patients aged 65 years and older.

Children and Adolescents

Tofacitinib has been used in children as young as 2 years of age in trials with juvenile arthritis. While the safety and efficacy of tofacitinib in children aged from neonates to <18 years of age has not yet been established in large clinical trials, a number of case series have been published in the medical literature where tofacitinib has been used to treat alopecia areata in children. We have experience in the use of tofacitinib for alopecia areata in children who have failed conventional therapy or who are experiencing psychological

impairment due to alopecia. We have not noticed any difference in effectiveness or side-effects when compared to adults.

Who should not take tofacitinib?

You should not take tofacitinib if you are planning a pregnancy, pregnant or breastfeeding. Females of child bearing years will need to be on adequate contraception at the discretion of the prescribing doctor. It is important that you disclose all medication, allergies and medical disorders to your doctor prior to commencing treatment. You should not take tofacitinib if you have an active or long-term infection or a history of a previous cancer.

Extra care is required for patients receiving immunomodulatory agents for other health conditions.

How do I take it?

Your doctor will decide what dose you are to take and how often they wish you to take your tofacitinib. Your pharmacist will explain this to you further when you obtain your medication.

What if I miss a dose?

If you miss a dose of tofacitinib please do not take double dose to make up for the forgotten dose, but continue with your next dose as per your schedule.

Where should I keep my tofacitinib?

Please store your medication at room temperature (below 25°C) in a cool and dry place away from sunlight and children.

What must I avoid while taking tofacitinib?

Please avoid grapefruit or grapefruit juice while taking tofacitinib. Many other drugs can interact with tofacitinib- please seek advice before taking any new supplement or medication. Please discuss with your doctor before receiving any vaccinations (live vaccines should be avoided) or if you are planning any routine surgery. The yearly flu vaccination is safe and is recommended.

How expensive is tofacitinib?

While tofacitinib is subsidized by the health care system (PBS) for rheumatoid arthritis, it

is not subsidized for alopecia areata. Patients with alopecia areata have to pay in full for their treatment. Your pharmacists will provide you with exact details of the price of your treatment.

Strategies to minimize the cost

Your doctor may prescribe tofacitinib to be dissolved under the tongue rather than swallowed and / or together with a second medication to prevent de-activation of tofacitinib in the liver. This enhances the effectiveness of the tofacitinib and allows a lower dose to be prescribed. This may reduce the cost of treatment.

How long will I be on tofacitinib?

It may take anywhere between 6 and 18 months to achieve complete regrowth of your hair. If you do achieve complete regrowth we aim to maintain the treatment at full dose for a further 6 months before we start slowly reducing the dose and eventually withdrawing the therapy completely. Patients who relapse can restart treatment.

Cancer risk

The role of treatment with tofacitinib on the future development and course of malignancies is not known. Regular skin examinations are recommended, particularly for patients with an increased risk for, or a prior history of, skin cancer. It is advisable to keep up with your regular routine cancer screening tests as advised by your GP.

Who else can take tofacitinib?

Tofacitinib is currently used to treat rheumatoid arthritis, ulcerative colitis and psoriatic arthritis. There are numerous other conditions like eczema, vitiligo and psoriasis undergoing trials with tofacitinib.

What happens if I take an overdose of tofacitinib?

Call your doctor or Poisons Information Centre immediately (13 11 26) or go to your nearest emergency department.

About Sinclair Dermatology

Located over three levels at 2 Wellington Parade East Melbourne, Sinclair Dermatology is the largest dermatology practice in Victoria, Australia, treating more than 50,000 patients a year.

There are 13 specialist dermatologists, a plastic surgeon, a hair transplant, a psychologist. 5 dedicated dermatology nurses, two hairdressers, a dermal clinician and an administrative staff of more than 20 people. We have five operating theatres, a range of medical-grade lasers, phototherapy, medical photography and trichoscopy facilities.

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