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Xeljanz (tofacitinib)

An overview of Xeljanz and why it is authorised in the EU

What is Xeljanz and what is it used for?

Xeljanz is a medicine used to treat:

- adults with moderate to severe rheumatoid arthritis, a disease that causes inflammation of the joints. Xeljanz is used with another medicine, methotrexate, after treatment with one or more medicines known as disease-modifying anti-rheumatic drugs (DMARDs) has not worked well enough or has led to troublesome side effects. Xeljanz can be taken on its own if patients cannot take methotrexate;
- adults with psoriatic arthritis (red, scaly patches on the skin with inflammation of the joints). Xeljanz is used together with methotrexate after treatment with one or more DMARDs has not worked well enough or has led to troublesome side effects;
- children from two years of age with active polyarticular juvenile idiopathic arthritis (pJIA) or juvenile psoriatic arthritis, a subtype of juvenile idiopathic arthritis (JIA), which is a long-term disease that causes joint pain and inflammation in children. Xeljanz is used after treatment with one or more DMARDs has not worked well enough. Xeljanz can be taken together with methotrexate or on its own if patients cannot take methotrexate;
- adults with moderate to severe ulcerative colitis, a disease that causes inflammation and ulcers (sores) in the lining of the gut, after treatment with other medicines has not worked well, has stopped working or has led to troublesome side effects;
- adults with ankylosing spondylitis, a disease that causes inflammation of the joints of the spine, after treatment with other medicines has not worked well enough.

Xeljanz contains the active substance tofacitinib.

How is Xeljanz used?

Xeljanz is available as film-coated and prolonged-release tablets and as a liquid to be taken by mouth twice a day. 'Prolonged-release' means that Xeljanz is released slowly from the tablet over a few hours.

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Treatment may be stopped in patients who develop an infection, which is a known side effect of the medicine, or in those with abnormal levels of red blood cells or certain white blood cells.

Xeljanz can only be obtained with a prescription and treatment should be started and supervised by a specialist doctor experienced in treating the relevant condition.

For more information about using Xeljanz, see the package leaflet or contact your doctor or pharmacist.

How does Xeljanz work?

The active substance in Xeljanz, tofacitinib, works by blocking the action of enzymes known as Janus kinases. These enzymes play an important role in the process of inflammation that occurs in rheumatoid, psoriatic or juvenile idiopathic arthritis, and ulcerative colitis. By blocking the enzymes' action, tofacitinib helps reduce the inflammation and other symptoms of these diseases.

What benefits of Xeljanz have been shown in studies?

Rheumatoid arthritis

Six studies in over 4,200 patients with rheumatoid arthritis have shown that Xeljanz is effective at reducing joint pain and swelling, improving joint movement and slowing down joint damage. Most patients in these studies had tried other treatments before, and most took Xeljanz with methotrexate.

In one of the studies, where Xeljanz was taken alone, Xeljanz was more effective than methotrexate at slowing down joint damage and reducing symptoms. In another study, Xeljanz taken alone was more effective than placebo (a dummy treatment) at reducing symptoms, such as pain and swelling.

Psoriatic arthritis

Xeljanz, in combination with methotrexate, was shown to be effective at improving symptoms of psoriatic arthritis in two main studies.

The first study compared Xeljanz with adalimumab (an injected medicine for psoriatic arthritis) and placebo in 422 patients. The second study compared Xeljanz with placebo in 395 patients. In both studies, patients' disease had not responded satisfactorily to other treatments.

In the first study, symptoms improved substantially in 50 and 52% of patients taking Xeljanz and adalimumab, respectively, for three months, compared with 33% of those receiving placebo; patients taking Xeljanz or adalimumab also showed a greater improvement in their ability to perform everyday activities. Similarly, in the second study, Xeljanz was more effective than placebo at improving symptoms (50% of Xeljanz-treated patients versus 24% of those given placebo) and ability to perform everyday activities.

Juvenile idiopathic arthritis

Xeljanz was more effective than placebo at reducing symptoms of juvenile idiopathic arthritis both in combination with methotrexate and alone. The study compared disease flare-ups (worsening of symptoms) between patients treated with Xeljanz or placebo.

In the study involving 173 patients between 2 and 17 years old with juvenile idiopathic arthritis, 28% of the patients who received Xeljanz experienced flare-ups after 26 weeks compared with 53% of those who received placebo.

Ulcerative colitis

Xeljanz was more effective than placebo at reducing the symptoms of ulcerative colitis in three main studies.

In the first study in 614 patients with ulcerative colitis, 18% of patients treated with Xeljanz 10 mg twice a day had mild or no symptoms after eight weeks of treatment compared with 8% of patients who received placebo. Similarly, in the second study involving 547 patients, 17% of patients treated with Xeljanz had mild or no symptoms after eight weeks of treatment compared with 4% of patients receiving placebo.

In the third study involving 593 patients, 34% of patients treated with Xeljanz 5 mg twice a day had mild or no symptoms after a year of treatment compared with 11% of patients receiving placebo. Additionally, more patients treated with Xeljanz were able to reduce their use of corticosteroid medicines.

Ankylosing spondylitis

Xeljanz was more effective than placebo at reducing symptoms of ankylosing spondylitis in one study involving patients that had not responded well enough to previous treatment. The main measure of effectiveness was a 20% reduction in ASAS scores (back pain, morning stiffness and other symptoms) after 16 weeks of treatment.

In this study, involving 269 patients, ASAS scores were satisfactorily reduced in around 56% of patients who received Xeljanz, compared with about 29% of those who received placebo. Additionally, around 41% of patients treated with Xeljanz had a 40% reduction in ASAS scores, versus about 13% of patients on placebo.

What are the risks associated with Xeljanz?

For the complete list of side effects and restrictions with Xeljanz, see the package leaflet.

The most common side effects with Xeljanz (which may affect up to 1 in 10 people) are headache, infection and inflammation of the nose and throat, diarrhoea, nausea (feeling sick) and hypertension (high blood pressure).

The most common serious side effects seen with Xeljanz are serious infections such as pneumonia (infection of the lungs), herpes zoster (shingles), urinary tract infection, cellulitis (infection of the deep skin tissue), diverticulitis (infection affecting the intestines) and appendicitis (infection of the appendix), as well as opportunistic infections that can occur in patients with weakened immune systems.

Xeljanz must not be used in patients with active tuberculosis, serious infections or any opportunistic infection. Xeljanz must also not be used in patients with severely reduced liver function or pregnant and breastfeeding women. Women who are able to have children must use contraception during treatment with Xeljanz and for at least four weeks after stopping treatment.

Xeljanz should only be used if no suitable treatment alternatives are available in patients aged 65 years or above, in patients with a history of cardiovascular disease (such as heart attack or stroke) or with risk factors for such a disease (such as current or previous long-term smokers), or in patients at increased risk of cancer.

Why is Xeljanz authorised in the EU?

Several studies have shown that Xeljanz is effective at treating rheumatoid arthritis, psoriatic arthritis, ulcerative colitis, specific subtypes of juvenile idiopathic arthritis and ankylosing spondylitis in patients who had previously tried other treatments. The fact that Xeljanz is taken by mouth may be an advantage compared with existing medicines taken as an injection under the skin.

The most important side effect seen with the medicine is infection, and there are specific recommendations to help healthcare professionals reduce this risk. In general, the risks with Xeljanz were similar to those of other medicines of its class.

The European Medicines Agency, therefore, decided that Xeljanz's benefits are greater than its risks and it can be authorised for use in the EU.

What measures are being taken to ensure the safe and effective use of Xeljanz?

The company that markets Xeljanz will provide educational materials to healthcare professionals and patients containing information about the risks with the medicine. Particularly the risk of serious infections, blood clots, major cardiovascular events and cancer in certain patients. They will also include a reminder that Xeljanz should not be taken during pregnancy and that women who are able to have children should use contraception during treatment and for at least four weeks after stopping treatment.

Recommendations and precautions to be followed by healthcare professionals and patients for the safe and effective use of Xeljanz have also been included in the summary of product characteristics and the package leaflet.

As for all medicines, data on the use of Xeljanz are continuously monitored. Side effects reported with Xeljanz are carefully evaluated and any necessary action taken to protect patients.

Other information about Xeljanz

Xeljanz received a marketing authorisation valid throughout the EU on 22 March 2017.

Further information on Xeljanz can be found on the Agency's website: ema.europa.eu/medicines/human/EPAR/xeljanz

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