Methotrexate is an oral treatment. It is a synthetic (man-made), small-molecule medicine. Methotrexate is used to treat psoriasis. It is also often used off-label to treat psoriatic arthritis. If you’re using a medicine off-label, that means you’re using it for a disease or health condition other than the one it was approved for by the U.S. Food and Drug Administration (FDA).

How effective is it?

Methotrexate helps to stop inflammation in the skin, joints and tendons and reduce psoriasis and psoriatic arthritis symptoms.

In a research study comparing methotrexate with a placebo (an inactive pill, liquid or powder that has no treatment value):

- 36 percent of adults with psoriasis experienced at least a 75 percent improvement after 4 months

Treating your psoriatic disease is important for disease management, reducing your risk for comorbidities (related health conditions) and improving your overall health and quality of life. Keep in mind that each person responds differently to treatments. Speak with your health care provider about what treatment may be most appropriate.

How does it work?

Some oral treatments for psoriatic disease act on part of your immune system, while others may act on your whole body. Methotrexate works throughout the body to suppress (lower) your overactive immune system and targets a specific enzyme involved in cell growth to slow down the rate of skin cell growth.

Your immune system protects your body from illness and infections. With psoriatic disease, the immune system is overactive. This causes inflammation of the skin and speeds up skin cell growth. It also causes inflammation in joints, tendons and ligaments in psoriatic arthritis.
Who can take it?

Adults over the age of 18 with moderate to severe psoriasis can take methotrexate.

Who should not take it?

You should not take methotrexate if you:

- Are pregnant, breastfeeding or planning for a pregnancy
- Have alcoholism, alcoholic liver disease or other chronic liver disease
- Have immunodeficiency syndromes
- Have pre-existing blood problems, such as bone marrow hypoplasia, leukopenia, thrombocytopenia or significant anemia
- Are hypersensitive or have an allergic reaction to methotrexate
- Take certain medications that interact with methotrexate

Speak with your health care provider about a change in dosage if you have renal (kidney) impairment, ascites (buildup of fluid in the abdomen) or pleural effusion (buildup of fluid between the lungs and chest).

What are the risks?

There is an increased risk for infections. This is because the treatment causes some immunosuppression (lowering the function of the immune system). If you notice any sign of infection, speak with your health care provider right away. Avoid receiving live vaccines while taking methotrexate.

There have been rare reports of:

- Organ system toxicity, particularly the liver
- Birth defects and/or fetal death
- Fertility problems, including low sperm count and abnormal menstrual function
- Toxicity when used incorrectly or in people with lowered kidney function, ascites or pleural effusion
- Low blood count
- Kidney problems
- Dizziness and fatigue

Common side effects

In clinical trials with adults with psoriasis, the most common side effects associated with methotrexate are similar to those seen in adults with rheumatoid arthritis using methotrexate:

- **Elevated liver function tests**: 15% of patients treated with methotrexate reported elevated liver function tests
- **Nausea and/or vomiting**: 10% of patients treated with methotrexate reported nausea and/or vomiting
- **Alopecia (hair loss)**: 3 to 10% of patients treated with methotrexate reported alopecia
- **Photosensitivity**: 3 to 10% of patients treated with methotrexate reported photosensitivity (sensitivity to light)
- **Burning of skin lesions**: 3 to 10% of patients treated with methotrexate reported burning of skin lesions

These side effects happen most often after the first dose and may decrease after additional doses or over time. The side effects are generally mild and do not cause most people to stop taking methotrexate. Keep in mind that side effects observed in clinical trials may not predict actual rates of side effects.

Comparison data for rates of side effects with placebo is not available.

What should I do next?

Contact our Patient Navigation Center to find providers, prepare for appointments, discuss treatments and get help with accessing treatments (find contact information below).