

## **Methotrexate**

### **What is Methotrexate?**

Methotrexate is a medication that suppresses the immune response to heal inflammation. It is used to induce and maintain remission in Crohn's disease.

### **How is it administered?**

Methotrexate is administered as a once a week either oral (pill) regimen or by subcutaneous injection (in the thigh or abdomen). The typical dose of methotrexate can range from 10mg to 25mg once a week. It is more reliably effective when administered as an injection. Sometimes it is used in combination with another medication (such as a biologic) to prevent your body's tendency to reject those medications. In that setting, it may be used at a lower dose.

### **When can I expect to respond to Methotrexate?**

Methotrexate is a relatively slow acting medication that can take up to 3-6 months to have a benefit. It is not effective in treating acute relapses of Crohn's disease and ulcerative colitis, and in that setting is often used in combination with other medications that act faster such as corticosteroids (prednisone, budesonide).

Approximately 5 out of 10 patients with Crohn's disease will have a good response to methotrexate. In clinical studies, methotrexate alone was not effective in most patients with ulcerative colitis.

### **What testing is needed on therapy?**

Methotrexate can cause blood count and liver test abnormalities. Your doctor will request you to get those monitored by blood test every 2 weeks for the first 3 months. Thereafter, you will need to do blood tests to monitor these parameters every 3-4 months while you are on the medication.

### **What are the potential side effects related to Methotrexate?**

The most frequent side effect with methotrexate is nausea. This usually resolves within 1-2 days of taking the medication. It can be reduced by taking the medication at night or using anti-nausea medications along with the methotrexate. Injected methotrexate causes less nausea than the oral tablets.

Methotrexate makes your body deficient in a vitamin called folic acid. For this reason, as long as you are on methotrexate therapy, you need to take a prescription folic acid 1mg daily supplement.

Allergic reactions to methotrexate can present as cough or difficulty breathing. If you notice this within a month of starting treatment, you should let your provider know.

High doses of methotrexate, particularly when taken over a prolonged period of time may cause scarring in the liver called 'fibrosis'. This is uncommon but should be monitored through blood tests every 3-4 months.

As with other medications that act on the immune system, Methotrexate can increase your risk of infections. Serious infections are uncommon, occurring in fewer than 2 or 3 out of 100 people. Significant medical conditions like uncontrolled diabetes or lung disease may increase this risk.

Methotrexate may increase the risk of lymphoma, a form of cancer of the lymph node. The frequency of this in the general population is estimated to be around 2 out of 10,000 people. In those on Methotrexate/6-MP, this risk may increase to 3-4 in 10,000.

Please see the medication package insert for the full list of potential side effects.

### **Is Methotrexate safe during pregnancy and breast feeding?**

Methotrexate should NOT be used in pregnant women or in those contemplating pregnancy. Methotrexate has been linked to birth defects, and women on methotrexate should use reliable contraception. Women on methotrexate contemplating pregnancy should stop treatment at least 3 months prior to conceiving.

Use of methotrexate in men has not been linked to birth defects in the baby. However, men should discuss whether this medication needs to be temporarily stopped with your provider.

### **Health maintenance on Methotrexate therapy**

It is important to be up to date with your health maintenance while on Methotrexate therapy. This includes being current on all the recommended vaccines including annual influenza vaccine and pneumococcal vaccines. You should not receive live virus vaccines while on treatment or within 3 months of stopping (or starting it).

It is also important to be up to date in your general cancer screening including mammograms and pap smears for women, and dermatologic (skin check-ups) for both men and women. Make sure to speak to your primary care doctor about whether you are up-to-date on all your cancer screening and immunizations.