

Should I take methotrexate (Rheumatrex®) alone or with other disease-modifying anti-rheumatic drugs for rheumatoid arthritis?

A Cochrane decision aid to discuss options with your doctor

This decision aid is for you if:

- You are 16 or older.
- Your doctor has told you that you have active rheumatoid arthritis (RA).
- You have been taking methotrexate and it is not helping your rheumatoid arthritis.

What is Rheumatoid Arthritis (RA)?

When you have rheumatoid arthritis, your immune system, which normally fights infection, attacks the lining of your joints making them inflamed. This inflammation causes your joints to be hot, swollen, stiff, and painful. The small joints of your hands and feet are usually affected first. If the inflammation goes on without treatment, it can lead to damaged joints. Once the joint is damaged it cannot be repaired, so treating rheumatoid arthritis early is important.

What is Methotrexate?

Methotrexate is a disease-modifying antirheumatic drug (DMARD). It is the most commonly used DMARD in rheumatoid arthritis. It works to control inflammation in your joints. Methotrexate is taken once per week and it comes in pill form or as an injection. Methotrexate only works while you are taking it. It will take 6 to 8 weeks for the methotrexate to work. It is important for you to keep taking the medicine. Your doctor may start you on a low dose and gradually increase your dose. Pay close attention to your doctor's directions and to keep your medical appointments to catch any complications early.

What are your options?



Methotrexate alone

Methotrexate (MTX) plus other Disease modifying anti-rheumatic drugs (DMARDs)

I will discuss the other treatment and prevention options with my doctor.

What other health factors may affect your choice?

Check any that apply and discuss your concerns with your doctor.

- I have had a previous reaction to methotrexate.
- I am pregnant, planning on becoming pregnant, or am breast feeding.
- I am a man who is planning a pregnancy with my partner.
- I have an active infection.
- I am taking antibiotics containing sulfa such as (Bactrim or Septra).
- I have problems with my liver, kidney, or a blood disorder
- Other factors: _____

Checklist developed by Andy Thompson MD FRCPC (Revised November, 2007), ©2007 Available at www.RheumInfo.com

Working through the 4 steps of this decision aid may help you decide.

Step 1: What are the benefits and side effects of each option?

What does the research show?

Blocks of 100 faces show a 'best estimate' of what happens to 100 people who had tried methotrexate before without improvement. Each face (☺) stands for one person. The shaded areas show the number of people affected. There is no way of knowing in advance if you will be affected.



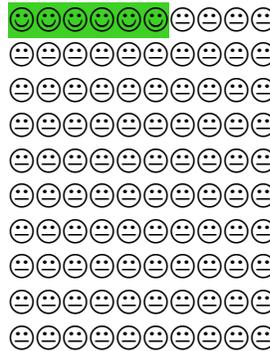
Benefits +++

22 more people who took MTX with other DMARDs had a 50% improvement in the number of tender or swollen joints and other outcomes such as pain and disability (ACR 50) after 1-2 years. (NNT: 5)

Option A: Take MTX alone

94 Do not improve

6 Improve



Option B: Take MTX with other DMARDs

72 Do not improve

28 Improve



Side Effects ++

2 more people who took MTX alone stopped treatment due to side effects. **This may have happened by chance.**

We do not have precise information about side effects and complications. This is particularly true for rare but serious side effects. Possible side effects include nausea, headache and tiredness. Rare complications may include lung problems. It is important to keep medical appointments to catch any serious adverse events early.

82 avoid side effects

18 stop treatment



84 avoid side effects

16 stop treatment



Note: The options include 'estimates' of what happens to groups of people based on the available research. The quality of these estimates is summarized using the GRADE system as follows:

- ++++ **High** quality – further research is **very unlikely to change** the estimate.
- +++ **Moderate** quality – further research **may change** the estimate.
- ++ **Low** quality – further research is **likely to change** the estimate.
- + **Very low** quality – further research is **very likely to change** the estimate.

*NNT stands for Number Needed to Treat. It is a way of showing how many people must take a drug for one person to benefit.

Step 3: What else do you need to prepare for decision making?



Knowledge

Find out how well this decision aid helped you learn the key facts.

Check the best answer.

- | | | | | | | | | |
|--|--------------------------|------|--------------------------|-----------------|--------------------------|----|--------------------------|------------|
| 1. Which option has the highest chance of improving symptoms of rheumatoid arthritis? | <input type="checkbox"/> | MTX | <input type="checkbox"/> | MTX with DMARDs | | | | |
| 2. Methotrexate can be taken as a pill or an injection | <input type="checkbox"/> | True | <input type="checkbox"/> | False | | | | |
| 3. If 100 people take methotrexate with other DMARDs, how many more people had a 50% improvement in the number of tender or swollen joints and other outcomes such as pain and disability compared to people taking Methotrexate alone. | <input type="checkbox"/> | 10 | <input type="checkbox"/> | 22 | <input type="checkbox"/> | 50 | <input type="checkbox"/> | Don't know |
| 4. If 100 people take methotrexate alone, how many more people will have side effects compared to people taking methotrexate with other DMARDs? | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 15 | <input type="checkbox"/> | 40 | <input type="checkbox"/> | Don't know |

Check your answers at the bottom of the page.

Do you know enough about the benefits and side effects of taking methotrexate with other DMARDs?

Yes No



Values

Are you clear about which benefits and side effects matter most to you?

Yes No



Support

Do you have enough support and advice from others to make a choice?

Yes No



Uncertainty

Do you feel sure about the best choice for you?

Yes No

Step 4: What are the next steps?

- I will take methotrexate alone
- I will take methotrexate with other disease modifying anti-rheumatic drugs
- I need more information and I will discuss the options with my doctor

This information is not intended to replace the advice of a health care provider.

Answers for key facts: 1. MTX with DMARDs 2. True 3. 22 4. 2

This decision aid was developed by Rader, T. Maxwell, L. Ghogomu, E. Tugwell, P. Welch, V. Conflict of interest available from trader@uottawa.ca. Funded in part by the Canadian Institutes of Health Research. Format based on the Ottawa Personal Decision Guide © 2000, A O'Connor, D Stacey, University of Ottawa, Canada. Last reviewed: February 2011.

Acknowledgements: The authors wish to thank Jack Karsh, MD, FRCPC for his scientific and clinical review of this decision aid.

Information on benefits and harms from: Katchamart W, Trudeau J, Phumethum V, Bombardier C. Methotrexate monotherapy versus methotrexate combination therapy with non-biologic disease modifying anti-rheumatic drugs for rheumatoid arthritis. *Cochrane Database of Systematic Reviews* 2010, Issue 4. Art. No.: CD008495. DOI: 10.1002/14651858.CD008495.

