

Inflammatory arthritis

Shared Decision Making

DMARDs



[El Miedany et al. Ann Rheum Dis 74\(Suppl2\): 1002](#)

[DOI: 10.1136/annrheumdis-2015-eular.1410](https://doi.org/10.1136/annrheumdis-2015-eular.1410)

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Supporting your Decision Making

- This booklet is **not meant to replace other information leaflets** or talking with your treating health care professional.
- Rather, its goal is to inform you about your treatment options and support your decision making.

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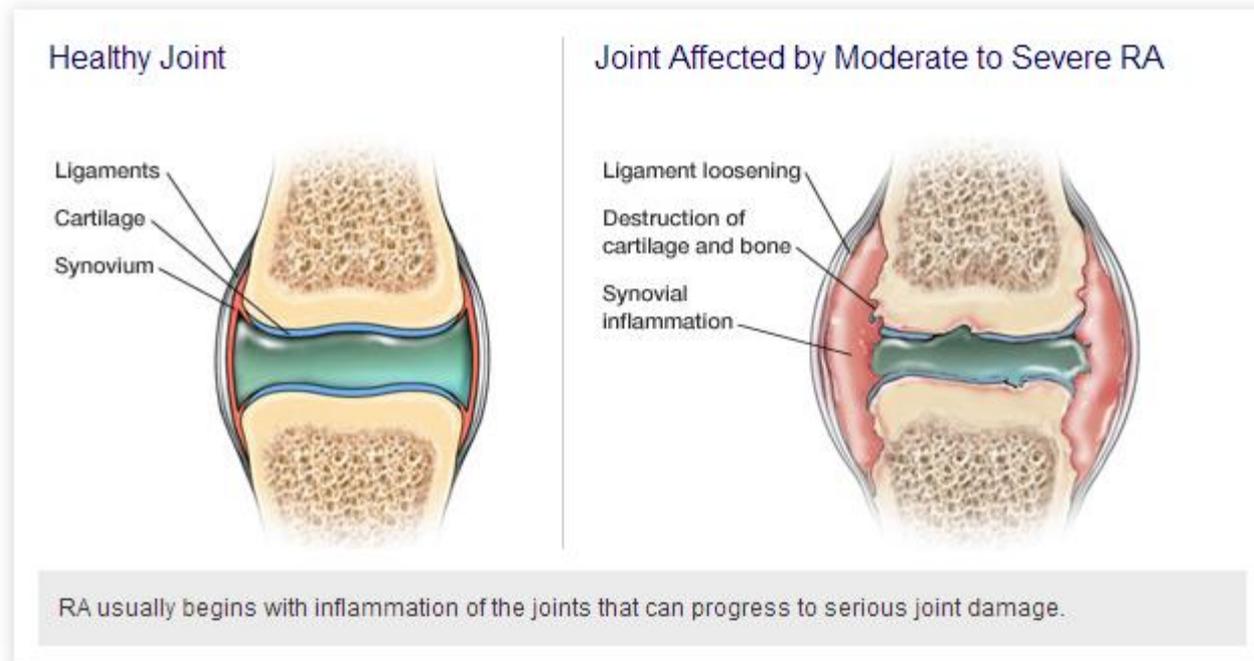
What is Shared Decision Making Tool? ≡

- **Shared Decision Making is a new approach aiming at achieving the partnership between you as a patient and the treating doctor. It has been used by medical providers to enhance the discussion about your disease management. It was developed to give you a simple idea, in a plain language, about effectiveness and outcome probabilities of the treatment options for your disease.**
- **This tool is dedicated to the standard treatment of inflammatory arthritis e.g. rheumatoid arthritis / psoriatic arthritis, namely, Disease modifying drugs (DMARDs) . It was developed following the international Patient Decision Aid Standards Consortium criteria* and has been developed and used with other people suffering from similar condition. Our pilot testing revealed that this tool has helped people like you to know more about risks and benefits of the DMARDs treatment and to make a decision about future treatment.**

What is Arthritis?



- **Arthritis means inflammation of joints. As the Joint get inflamed, the joint lining cells start to grow causing joint swelling.**



How RA Joint Damage Progresses Without Treatment

- With the inflammatory process remaining active, the joint lining cells continue to grow and expand, first filling the joint cavity & recess.



- As the growing cells continue to expand, they cause joint swelling . Then it causes break down of the bone causing “erosions”. It also affect the surrounding ligaments and tendons.
- This weakens the joint and over time allows the joints to move out of line and deform.

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Why Do We Treat Arthritis?



Targets Are

Stop or suppress joint inflammation	Minimize Pain and swelling	Prevent Joint Damage	Allow you to continue living in the way you like and able to do your job.
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**“Now as we have identified
the problem,**

**it’s time to think what to do
next”**

Available Medications at This Stage

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3 Types of Medications



Anti-inflammatory Drugs	Disease Modifying Drugs	Steroids
<ul style="list-style-type: none">- Will be commenced at initial stage before the diagnosis is made.- Helps to take the edge of the pain off, but does not stop the disease process.- Examples: Naproxen, Ibuprofen, Diclofenac	<ul style="list-style-type: none">- Will be recommended to start once the inflammatory arthritis diagnosis is made & should continue as long as the disease continues.- Helps to stop the disease process.- Examples: Methotrexate, Sulphasalazine , leflunomide & Hydroxychloroquine	<ul style="list-style-type: none">- Can not be used as a single therapy.- Helps to ease the symptoms swiftly but does not stop the disease process.- Usually used in combination with disease modifying drug therapy- Examples:<ul style="list-style-type: none">- Prednisolone Tablets- Injections either intramuscular or into the joint.

Treatment Options

You have 3 options to choose from

**Continue
your
current
Treatment**

**Start
Disease
Modifying
Drug
therapy**

**Defer your
treatment
for the
time being**

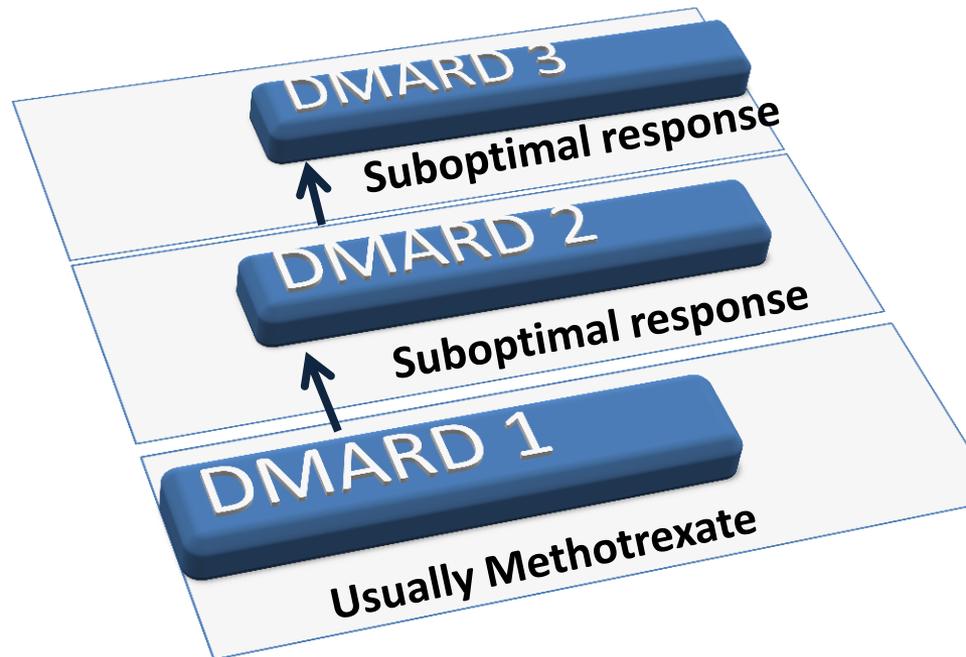
DMARDs Therapy

- Is usually **the first option** offered for your arthritis.
- **Methotrexate** is the first drug of choice which will be offered to you.
- **There are 2 approaches to start DMARDs therapy:**
 - Step up
 - Combination therapy

Starting DMARDs Therapy Approaches

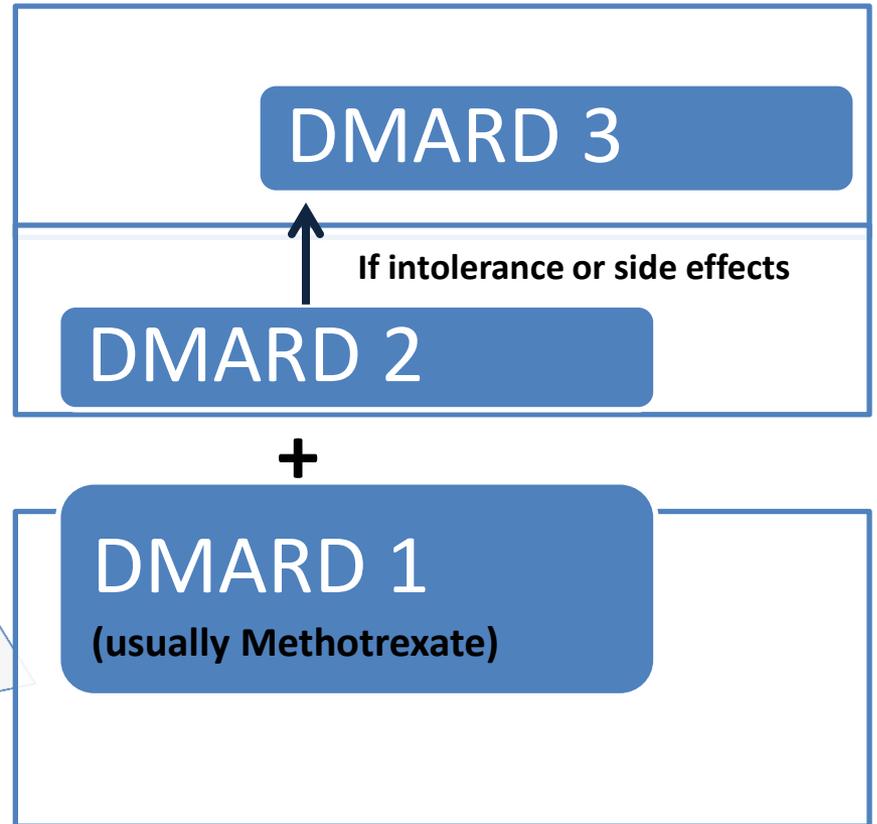
Step Up

Methotrexate is usually the first option



Combination therapy

Methotrexate Plus another DMARD



Disease Modifying Drug therapy

	Methotrexate	Sulphasalazine	Leflunomide	Hydroxychloro- quine
Experience: Used since	1976	1930s	1998	1960s
How it works	hampering the growth of hyper-active inflamed joint (synovial) cells.			
Forms of medication	- Tablet - Injection	Tablet (enteric coated)	Tablet	Tablet
Frequency of taking the medicine	Weekly	Daily	Daily	Daily
Time to kick in	- 6-8 weeks - Full benefit in 6 months	- 6-8 weeks - Full benefit in 6 months	- 6-8 weeks - Full benefit in 6 months	- 6-8 weeks - Full benefit in 6 months

Disease Modifying Drug therapy: DMARDs

Benefits

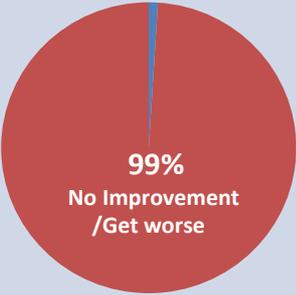
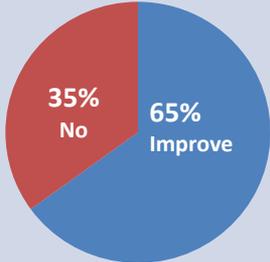
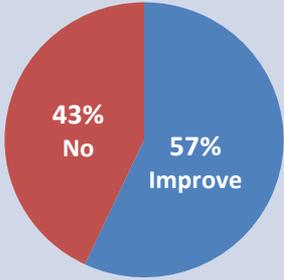
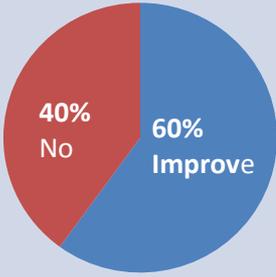
	Methotrexate	Sulphasalazine	Leflunomide	Hydroxychloro- quine
Impact on the Disease	known as DMARD as they not only decreases the pain and swelling caused by arthritis, but can also reduce joint damage, which causes disability.			
Impact on you & your life	<ul style="list-style-type: none">-Less joint pain / Swelling.-Less stiff in the morning-Reduce joint damage by 85%.-Able to continue activities of daily living-Able to work			

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What are my Chances of Improvement?

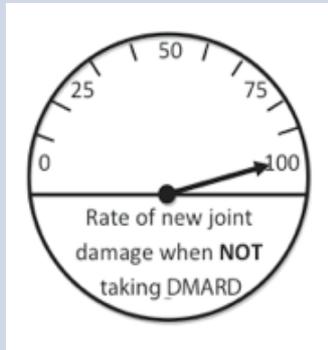


Some patients improve more than others with a new treatment

No Treatment	Methotrexate	Sulphasalazine	Leflunomide	Hydroxychloro- quine
 <p>99% No Improvement /Get worse</p>	 <p>35% No 65% Improve</p>	 <p>43% No 57% Improve</p>	 <p>40% No 60% Improve</p>	<p>Primarily used in combination with other drugs:</p>
<p>No Treatment: -Disease will get worse -Joint Damage -Difficulty in doing Activities of daily life.</p>	<p>After starting MTX: -50% of patients will have major improvement - 15% will have complete suppression of the disease</p>	<p>After starting SZP: -30% of patients will have major improvement - 8% will have complete suppression.</p>	<p>After starting Lef.: -29% of patients will have major improvement - 13% will have complete suppression.</p>	<p>(methotrexate / sulphasalazine / Leflunomide.</p>

Joint Damage Speedometer

No Treatment



Methotrexate



Sulphasalazine



Leflunomide



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Understanding Side Effects



All drugs have the potential for benefit and harm

	Methotrexate	Sulphasalazine	Leflunomide
Common minor side effects	<ul style="list-style-type: none"> -Tiredness/ Sickness -Common Specially on the day you take MTX. -Sometimes can be severe, usually improves with time. -can be reduced with minor changes in the treatment program e.g.: reducing the dose, taking the medication at bedtime or taking Folic acid tablet 6 hours before MTX or folinic acid pills 6 hours after the MTX. -When you start MTX, you should talk with your doctor if you have side effects. - Adjusting the MTX dose will often minimize side effects. 	<ul style="list-style-type: none"> -increased sensitivity to the sun, -skin rashes, -headaches, and vivid dreams. -Stomach problems are also common. You may experience nausea, heartburn, and stomach pain, which sometimes occurs with bleeding. -When you start SSA, you should talk with your doctor if you have side effects. -Adjusting the SSA dose will often minimize side effects. 	<ul style="list-style-type: none"> -when first start LEF therapy it's common to have loose stools, which can lead to urgency and diarrhea in the first couple of weeks. -This usually improves during the first month after starting LEF. -Some people are allergic to LEF and will develop a rash. - LEF may also cause mouth sores and/or mild hair thinning, and can possibly lead to increased blood pressure. -When you start LEF, you should talk with your doctor if you have side effects. Adjusting the LEF dose will often minimize side effects.

Understanding Side Effects (2)

All the 3 Drugs May Affect the Liver

	Methotrexate	Sulphasalazine	Leflunomide
Liver irritation	The 3 drugs are broken down by the liver, therefore may cause liver irritation. Sometimes this can lead to permanent liver problems.		
Incidence of serious liver damage	1: 5000	<1:5000	<1:5000
Symptoms of liver affection	If you do have patterns of high liver tests, most likely you will not feel anything abnormal.		
Advice for Reducing Liver affection	<ol style="list-style-type: none">1. Do safety monitoring lab tests to monitor liver function tests.2. Notify your doctor of all drugs you take.3. Avoid daily alcohol use.4. Notify your doctor, If you have hepatitis B or C5. Avoid taking NSAIDs on daily basis		
Monitoring Liver Function Tests every 2 months	<p>-Normal liver function tests: there is a high level of assurance that medication can be continued safely.</p> <p>-Elevated liver function tests: will require stopping NSAIDs, adjust or stop the DMARD therapy.</p>		
How Shall I manage High tests?	<p>-Stop NSAIDs.</p> <p>-In most of the cases Liver function tests will return to Normal on temporarily stopping MTX.</p>		

Understanding Side Effects (3)

All the 3 Drugs May cause some changes in the Blood

	Methotrexate	Sulphasalazine	Leflunomide
Changes in the Blood Picture	-People with RA often have anemia (low levels of red blood cells). This can be caused by the disease, stomach ulcers, not taking the recommended Folic acid supplement therapy or other effects from drugs.		
Symptoms	-If you do have changes in your blood picture, most likely you will not feel anything abnormal. -Sometimes the changes in the blood picture, caused by any of the 3 medications, may present as fatigue, bleeding or increased risk of infection.		
Advice for Reducing Blood picture changes	1. Do safety monitoring lab tests to follow blood counts. 2. Notify your doctor of all drugs you take. 3. Make sure you take Folic acid whenever indicated. 4. Minimize taking anti-inflammatory therapy to only when you feel it is necessary.		
Monitoring full blood count (FBC) every 2 months	-Normal FBC: there is a high level of assurance that medication can be continued safely. -Changes in the FBC: Discuss the FBC result with the treating doctor, to identify the type of anemia and whether other investigations need to be done (such as blood check for iron, folate, vitamin B12 etc).		

Understanding Side Effects (4)

All the 3 Drugs May be associated with serious infections

	Methotrexate	Sulphasalazine	Leflunomide
What is a serious infection	infections severe enough that you would need to be admitted to the hospital for one or more days to receive antibiotics through the vein and/or other care like IV fluids and oxygen		
Incidence of serious infection/yr	2: 100	1:100	3:100
Advice for Preventing serious infections	<ol style="list-style-type: none">1. Take the medication as prescribed.2. Avoid or use the lowest dose of prednisone possible.3. Do safety monitoring lab tests as recommended.4. Keep up to date on pneumonia and flu vaccination5. Seek medical advice if you got unusual chest cold or other infection		

Understanding Side Effects (5)

Lung

	Methotrexate	Leflunomide
Lung Affection	- This usually causes a sudden onset asthma-like reaction or a dry cough. You might get short of breath with daily activities or minor exertion.	-This usually causes a sudden onset asthma-like reaction or a dry cough. You might get short of breath with daily activities or minor exertion.
incidence	1-2/100	1/100
How to reduce the Risk	-Get a Chest X-ray before starting MTX. -Quit smoking. -Report persistent cough or new shortness of breath to your doctor.	-Get a Chest X-ray before starting Leflunomide -Quit smoking. -Report persistent cough or new shortness of breath to your doctor.
Other Side effects	- mouth sores, - slight hair thinning, - sun sensitivity	

Understanding Side Effects (6)

Pregnancy

	Methotrexate	Sulphasalazine	Leflunomide
Pregnancy	<ul style="list-style-type: none">-MTX does not reduce a woman's ability to conceive during treatment or in the future.-If you or your spouse conceives a child while you are taking MTX, miscarriage or fetal birth defects can occur.	<ul style="list-style-type: none">-In men SZP can temporarily reduce sperm counts. This resolves when SZP is stopped. SZP does not have any impact on sexual interest or performance.-SZP is generally considered safe during pregnancy, but you should discuss reproductive plans with your doctor before taking SZP.	<ul style="list-style-type: none">-LEF does not necessarily reduce a woman's ability to conceive during treatment or in the future.-If you or your spouse conceives a child while you are taking LEF, miscarriage or fetal birth defects can occur. Therefore, sexually active men and women using LEF must use a medically approved form of birth control.
Advice for Pregnancy	<ul style="list-style-type: none">-Sexually active men and women using MTX must use a medically approved form of birth control.	<ul style="list-style-type: none">discuss reproductive plans with your doctor before taking SZP.	<ul style="list-style-type: none">-stop the medication.-you will need a special treatment to remove the Lef from your body, which will take about 2 months.

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Sorting it out



What is most important for me?

Please tick

	Very Important	Somewhat Important	Not Important
Improve Pain & Function (Expected to improve by 57-65%)			
Reduce Joint Damage (Rate of damage expected to drop to 15-40%)			
Possibility of infection (Possibility: 1-3/100)			
Possibility of liver affection (Possibility 1/5000)			
Other side effects			

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Moving Toward a Decision



Please tick in front of your decision. You may find it helpful to write the Pros & Cons

Your decision	Pros	Cons
Continue current medication <input type="checkbox"/>		
Start Methotrexate <input type="checkbox"/>		
Think more about other options <input type="checkbox"/>		
Defer Choice for now <input type="checkbox"/>		

Reflecting on Your Decision

- **As you work towards making a decision for your inflammatory arthritis, please tick the box to let us know whether these statements are true for you:**
- **I have been informed about my treatment options, as well as its benefits and possible risks.**
- **I am clear about which benefits and risks matter most to me.**
- **I am fully aware of my choices and have been given the chance to be involved in the decision.**
- **I feel I had enough support and advice enabling me to make a choice.**
- **I am aware of the nature of my disease and feel satisfied with my decision.**
- **If most or all of these statements are true for you, you are on your way to a good decision.**
- **If not, you may want to talk further with your doctor, nurse, family or other important support persons**

Signature:

Date: / /201

Thank you

- **You may hand this over now to your treating Health Care Professional.**

References

- Donahue KE. Systematic Review: Comparative Effectiveness and Harms of Disease-Modifying Medications for Rheumatoid Arthritis. *Annals Intern Med* 2008;148:124-134.
- Bathon J. A comparison of etanercept and MTX in patients with early rheumatoid arthritis. *N Engl J Med*. 2000 Nov 30;343:1586-93.
- Walker AM. Determinants of serious liver disease among patients receiving low-dose methotrexate for rheumatoid arthritis. *Arthritis Rheum*. 1993;36:329-35.
- Carroll GJ. Incidence, prevalence and possible risk factors for pneumonitis in patients with rheumatoid arthritis receiving MTX. *J Rheumatol*. 1994;21:51-4.
- 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 Syst Rev*. 2010 Apr 14;(4):CD008495.
- Singh JA et al. 2012 update of the 2008 American College of Rheumatology recommendations for the use of disease-modifying antirheumatic drugs and biologic agents in the treatment of rheumatoid arthritis. *Arthritis Care Res (Hoboken)*. 2012 May;64(5):625-39.

Reflecting on Your Decision

- As you work towards making a decision for your inflammatory arthritis, please tick the box to let us know whether these statements are true for you:
- I know the options
- I am informed about the benefits and harms of treatment.
- I was given the chance to be involved in the decision.
- I feel an informed choice was made.
- I feel I will have the support I need to get, take and monitor the safety of the new medicine.
- **If most or all of these statements are true for you, you are on your way to a good decision.**
- **If not, you may want to talk further with your doctor, nurse, family or other important support persons**

Signature:

Date: / / 201