Psoriatic Arthritis- Secondary Care

Our **Psoriatic Arthritis: First Line Treatments** information sheet gives information on the treatments that can be prescribed by a GP, or that might be prescribed if the psoriatic arthritis is only present in one joint, or not getting worse.

Most people with psoriasis should be referred to a Rheumatologist (a hospital consultant that specialises in arthritis) as soon as psoriatic arthritis is suspected. There is no straightforward test to diagnose psoriatic arthritis, and so a Rheumatologist is best placed to confirm a diagnosis, and give advice on treatment options.

This information sheet covers Disease Modifying Anti Rheumatic Drugs (DMARDs). These treatments cannot be prescribed by a GP, and are usually prescribed by a Rheumatologist, Dermatologist, or in a combined clinic where both the Dermatologist and Rheumatologist are present. The DMARD category for psoriatic arthritis includes:

- Methotrexate
- Sulfasalazine
- Leflunomide
- Apremilast
- Tofacitinib
- Biologic treatments – Cimzia (certolizumab pegol), Cosentyx (secukinumab), Enbrel (etanercept), Humira (adalimumab), Remicade (infliximab), Simponi (golimumab), Stelara (ustekinumab)

**What are DMARDs?**

DMARDs are treatments that alter the condition itself, rather than just treat the symptoms. DMARDs work by attacking the causes of inflammation in the joints. They lessen the activity of arthritis by reducing swelling and stiffness, reducing the pain as well. These treatments are different to anti-inflammatory medications, as they can help to stop the arthritis from getting any worse.

It can take a number of months for a DMARD to reach its full effect. However, they can often be taken at the same time as other first line medications, such as Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and painkillers, to help ease symptoms whilst the DMARD begins to work. Most DMARDs work on the immune system and are designed to be taken long-term, and therefore there is a possibility of more significant side effects than with painkillers and NSAIDs alone.
When should DMARDs be prescribed?
Psoriatic arthritis can cause irreversible damage to joints if effective DMARD treatment is not given when appropriate. There are two categories of DMARDs that are used for psoriatic arthritis – traditional systemics, and the newer biologic treatments.

Traditional systemic DMARDs (such as methotrexate, sulfasalazine, leflunomide) should be considered if:
- There is active psoriatic arthritis (i.e. inflammation is present in several joints despite using NSAIDs)
- The individual is unable to go about daily living, work or recreation easily
- Many joints are affected.

Biologic Treatments should be considered if:
The person has arthritis with three or more joints that are tender to touch and three or more joints that look or feel swollen, and at least two other traditional systemic DMARDs haven’t worked or cannot be tolerated (i.e. caused side effects that meant treatment had to be stopped).

As with psoriasis, it is often a process of trial and error to find a treatment or combination of treatments that work well for each person with psoriatic arthritis. Because of this, a second biologic treatment should be tried if no acceptable improvement is seen after 12 weeks on an initial biologic.

The following is a brief summary of some of the commonly-prescribed DMARDs for psoriatic arthritis. You should always check with your doctor before taking any other medications (including vitamins or herbal supplements) whilst you are being prescribed any of the DMARDs below. Similarly, you should always ask your doctor for advice on drinking alcohol, getting pregnant or breastfeeding whilst taking one of these treatments. Further information on each of these treatments is available from the Psoriasis Association.

**Methotrexate (also referred to by its brand names Matrex or Ebetrex)**
Methotrexate works to suppress the overactive immune system which causes inflammation, swelling and stiffness in psoriatic arthritis. Because of this suppression, a person taking methotrexate is likely to be more prone to infections.

Methotrexate is usually taken in tablet form once a week, but in some cases it is given as an injection. It can take up to 12 weeks to become fully effective. People taking methotrexate will need regular blood tests to monitor liver and bone marrow function, and check for infections. They should also have an annual flu vaccination.
Methotrexate can also be used to treat psoriasis – please see our Methotrexate information sheet for more in-depth information on this treatment.

**Sulfasalazine (also referred to by its brand name Salazopyrin)**
Sulfasalazine reduces inflammation in the joints, and decreases pain, swelling and stiffness. Some people will start to notice results within a few weeks of starting the treatment, however, it may take around 12 weeks for sulfasalazine to have a full effect.

Sulfasalazine is a tablet that is usually taken every day. The number and time to take your tablet will be explained to you by your doctor. The tablet has a special coating which means it dissolves more slowly, passing beyond the stomach before releasing its contents. This can help reduce nausea and stomach irritation associated with other treatments.

You will need to have frequent blood tests for the first three months of taking the drug, followed by regular tests every three months, to monitor liver function and check for infections. You may also need an annual flu vaccination. Sulfasalazine may also turn your urine orange or dark yellow and your tears may be discoloured. This is nothing to worry about, however if you use extended wear contact lenses tell your doctor as they may develop an orange stain.

**Leflunomide (also referred to by its brand name Arava)**
Leflunomide, like methotrexate was initially developed for use in the treatment of cancer. Leflunomide is an anti-T cell medication and as such is thought to control inflammation by interfering with T cell production of cytokines, similar to some of the biologics. It acts to suppress the overactive immune system, causing damage and pain to the joints.

Leflunomide is a tablet that is taken every day. Like other DMARDs, leflunomide does not work immediately – it may be up to six weeks before you feel any effect and as long as six months before you feel the full benefit. The potential side effects of leflunomide are similar to methotrexate and so you will have regular blood and blood pressure tests, and may need an annual flu vaccination.

**Apremilast (also referred to by its brand name Otezla)**
It is not known exactly how Otezla works in psoriasis or psoriatic arthritis. However, it is known that Otezla inhibits (ie. stops it from working as it usually does) an enzyme known as phosphodiesterase 4, or PDE4. PDE4 controls the inflammatory action within a cell, which can affect the level of inflammation associated with psoriasis or psoriatic arthritis. Helping to control this inflammation can lead to an improvement in symptoms for people with psoriasis or psoriatic arthritis.
Otezla is taken orally in tablet form twice a day. The dose is gradually increased over the first five days, until the patient is taking the full 30mg twice a day from day six onwards. Again, you will have regular monitoring tests, and may need an annual flu vaccination. Most people will need to have tried two of the more traditional systemic DMARDs before they can be offered apremilast to treat their psoriatic arthritis.

**Tofacitinib (also referred to by its brand name Xeljanz)**

Xeljanz is a Janus Kinase (JAK) inhibitor. It works differently to any of the other treatments that are currently available to treat psoriatic arthritis.

Cytokines are proteins that work in the immune system and play a key role in controlling cell growth and immune responses. It is thought that cytokines are over-active in people with psoriatic arthritis, leading to the overproduction of inflammation, which in turn causes the signs and symptoms of this condition. Cytokines rely on a family of enzymes known as Janus Kinase (JAK) enzymes, to help them distribute their messages. Xeljanz stops the activity of JAK enzymes, meaning that the inflammatory cycle of psoriatic arthritis is disrupted. Xeljanz is a tablet that is taken twice a day. At the moment, it can only be prescribed to people who have tried other DMARDs, including certain biologic treatments, and found that these have not worked or have stopped working.

**Biologic Treatments**

A number of biologic treatments are available to treat psoriatic arthritis. There are various criteria for when biologic treatments can be prescribed to treat psoriatic arthritis, and for some treatments the criteria may vary if you are in Scotland compared to England or Wales. Please check the information sheet on each individual biologic treatment for more information about when it can be prescribed.

The following treatments work in similar ways– by suppressing a specific chemical called tumour necrosis factor-alpha (TNF-alpha) that is involved in triggering inflammation in the immune system.

- **Cimzia** is taken in two injections at weeks 0, 2 and 4, and then in one injection every two weeks. Treatment may be stopped if no significant results are seen within 12 weeks.
- **Enbrel** is usually taken once or twice a week by injection. Again, treatment may be stopped if no significant results are seen within 12 weeks.
- **Humira** is usually taken once every two weeks by injection. Again, treatment may be stopped if no significant results are seen within 12 weeks.
- **Remicade** is given in hospital using an intravenous drip into a vein (an infusion). Initially the infusions are given once at the beginning of treatment, after two weeks, and then after another four weeks. You will then need an infusion (which takes between one and two hours) every...
eight weeks. Again, treatment may be stopped if no significant results are seen within 12 weeks.

**Simponi** is taken once a month by injection, on the same date each month. Again, treatment may be stopped if no significant results are seen within 12 weeks.

**Stelara** works in a slightly different way – by slowing down the activity of interleukin 12 (IL-12) and interleukin 23 (IL-23), chemical ‘messengers’ in the immune system that signal other cells to cause inflammation. It is usually taken by injection at week 0, week 4, and then every 12 weeks after that. Treatment may be stopped if no significant results are seen within 24 weeks.

**Cosentyx** and **Taltz** also work on interleukin activity – they bind to interleukin 17A (IL-17A) to inhibit (ie. stop it from working as it usually does) its inflammatory action. Cosentyx usually taken by two injections given at the same time, weekly for the first four weeks, and then every four weeks after that. Taltz is taken every other week until week 12, and then every four weeks after that.

As with the traditional systemic DMARDs, people taking biologic treatments will have regular blood tests and other checks, to monitor for side effects. As biologic treatments suppress the immune system, it is recommended that people taking them have an annual flu vaccination, as well as a pneumococcal vaccination before you start biologic treatment. Not all vaccinations, however, are safe to have when taking a biologic treatment, so you should always check with your Rheumatologist or another healthcare professional before having them.

This is not a complete list of the second line treatments a Rheumatologist may prescribe for you; other treatments that are usually used for other forms of inflammatory arthritis may be prescribed on a case-by-case basis.

More in-depth information on the treatments featured in this resource, and on first line treatments for psoriatic arthritis, is available from the Psoriasis Association. The information in this resource is not intended to replace that of a healthcare professional: If you have any concerns or questions about your treatment, do discuss this with your doctor and always read the patient information leaflet to make sure you are using them correctly.

For more information, or for a list of resources used in the production of this information sheet, please contact the Psoriasis Association.

October 2018 (Review Date: 12/20)