2019 Axial Spondyloarthritis Treatment Recommendations: A Brief Overview For Patients And Families
Introduction

If you’ve been diagnosed with ankylosing spondylitis or non-radiographic axial spondyloarthritis, you have options. It’s true the symptoms can be debilitating, sometimes even disabling. Even the names can be a challenge. It’s equally true that many people respond well to treatment, and there is a vibrant community waiting to help you live your best life. After all, you are one of more than 2 million Americans living with these conditions.

Experts have updated their treatment recommendations, and they are presented here in clear and simple terms. Because these conditions are in fact two ends of the same disease spectrum, this document will use a single term—axial spondyloarthritis, or \textit{axial SpA} for short—to refer to both ankylosing spondylitis and non-radiographic axial spondyloarthritis.

This document is divided into several categories: one for general information that applies to everyone with axial SpA, then broken down into more specific categories, including for those with stable disease (no or mild signs and symptoms), or active disease (consistently moderate or severe signs and symptoms), and those taking either non-steroidal anti-inflammatory drugs (NSAIDs), or biologic drugs, which is a broad category of prescription medications designed to treat axial SpA.

Each recommendation is based on all available scientific evidence, and the expertise and experiences of rheumatologists and people with axial SpA. But you are unique, and there is no replacement for working with your doctor to design the best plan for you. This document is designed to help inform that discussion. A more comprehensive overview of axial SpA and your treatment options are available at \texttt{spondylitis.org/Treatment-Information}. 
General Information And Recommendations For Axial SpA

• A rheumatologist is a doctor who is specially trained to treat a certain group of conditions including axial SpA. As such, they’re generally best suited to oversee your care. If you do not already have a rheumatologist, your current doctor can help you find one, as can the Spondylitis Association of America. Visit spondylitis.org.

• Physical therapy and exercise are vital to any axial SpA treatment plan. “Active” physical therapy (i.e., prescribed exercise) is preferred over “passive” options like massage. If it is safe to do so, you can exercise on your own. Talk to your doctor or physical therapist about the best plan for you.

• It can be valuable to learn more about axial SpA and connect with others in this community. Many in-person and online support groups exist, including those sponsored by the Spondylitis Association of America. For more, visit spondylitis.org/Support-Groups.

• You should expect checkups and different tests as part of your treatment. The most common tests are blood tests. Doctors may not perform follow-up X-rays or MRIs unless there is uncertainty over the status of your disease.

• Sometimes people with axial SpA develop a serious eye condition called iritis. Iritis, also known as uveitis, is inflammation in the eye leading to pain, redness, sensitivity to light, and sometimes blurred vision. Iritis needs immediate attention because it can lead to vision loss if left untreated. **If you suspect you have iritis, see a doctor right away or go to your nearest emergency room.** If this has happened to you or you are concerned about this happening, make an appointment to see an eye specialist (ophthalmologist). Your doctor can help you find one.

• Inflammatory bowel diseases like Crohn’s disease and ulcerative colitis may occur in people with axial SpA. Symptoms may include diarrhea, blood in the stool, abdominal pain, weight loss, and fatigue. If you suspect you may have an inflammatory bowel disease, discuss your symptoms with your doctor.

• Experts strongly recommend **against** having a chiropractor adjust your spine with manipulation (i.e., chiropractic adjustment) if your spine is fused or you have osteoporosis or low bone density.

If You Have Stable Axial SpA And Are Taking NSAIDs

NSAIDs (nonsteroidal anti-inflammatory drugs) are a great first line of defense against axial SpA. NSAIDs do more than relieve pain. As their name suggests, they also help reduce inflammation. That dual benefit makes them an ideal option. Over-the-counter examples include ibuprofen (Advil, Motrin), and naproxen (Naprosyn). (*Please see Table 1.*

**Is one particular NSAID recommended over any other?**
No. If it helps you, any NSAID is considered an effective choice.

**Are there any side effects?**
Yes. Possible side effects may include increased risks of bleeding in your digestive tract, kidney damage, high blood pressure, and heart disease. Although these side effects must be taken seriously, their risks are small, and the medications’ benefits are often believed to outweigh risks.

**How often should I take NSAIDs?**
If your axial SpA is stable, it is better to take NSAIDs as directed by your doctor and/or on an as-needed basis. However, many patients are stable **because** they take NSAIDs on a regular basis, and this is also appropriate.
If You Have Stable Axial SpA And Are Taking A Biologic

When NSAIDs alone are not enough or not a good option, doctors can prescribe drugs known as biologics. Biologics are taken either by self-injection, which your doctor can teach you how to do, or in the doctor’s office through an infusion into a vein.

There are two groups of biologics. The first is Tumor Necrosis Factor inhibitors, (TNFi). Examples include adalimumab (Humira), etanercept (Enbrel), golimumab (Simponi/Simponi Aria), infliximab (Remicade), and certolizumab pegol (Cimzia). There is also a growing number of TNFi biosimilars, which are highly similar copies of the original biologic. (Please see Table 1.) TNFis are the first group of biologics most patients try if their doctor decides a biologic is a good fit.

The second group is Interleukin 17 inhibitors, (IL-17 inhibitors). This is a newer group of drugs and includes secukinumab (Cosentyx) and ixekizumab (Taltz).

If I am taking a TNFi, should I also take an NSAID?

It is generally recommended that people receiving a TNFi biologic try stopping their NSAID if they are doing better.

Can biologics have side effects?

Yes. Possible side effects vary by drug and can include increased risk of infection. If you take a biologic, you and your doctor will closely monitor this. (Please refer to the product packaging information for details about the risks.)

If my axial SpA is stable, can I stop taking my biologic?

Experts generally advise against discontinuing your biologic, even when symptoms are mild or nonexistent. If you’d like to try reducing the dose, discuss the risks and benefits with your doctor.

If You Have Active Axial SpA And Are Taking NSAIDs

When the disease is actively causing symptoms that NSAIDs alone cannot manage, it may be time to investigate causes and other treatment options with your doctor.

When my symptoms are moderate or severe, how often should I take NSAIDs?

In this case, it is generally OK to take your NSAID every day on a schedule determined with your rheumatologist, rather than just when needed. No specific NSAID is recommended over another.

I’m continuously taking NSAIDs but still have signs and symptoms. How can I take my treatment to the next level?

Ask your doctor if moving to a biologic is appropriate for your specific situation. These drugs are generally considered the best choice when NSAIDs are not enough.

Let’s be specific. What, really, is the best option?

As everyone is different, you’ll need to talk to your doctor for more specific information.

However, in a broad sense, a TNFi is recommended as the initial biologic for most people.

The recommendations do not endorse any particular TNFi over another. However, there is an exception for people with frequent or difficult-to-treat iritis and/or inflammatory bowel disease, in which case a subgroup of drugs called TNFi monoclonal antibodies are preferred. These drugs include infliximab (Remicade), adalimumab (Humira), certolizumab pegol (Cimzia), and golimumab (Simponi/Simponi Aria).

If TNFi are not effective or you cannot tolerate them, there are other options. The other group of biologics, IL-17 inhibitors, is usually the next place to look.

There are a couple of other options that are not biologics, which include sulfasalazine (Azulfidine) or methotrexate (Otrexup/Rheumatrex). They should be considered only in certain cases or when a biologic is not available or appropriate.
If You Have Active Axial SpA And Are Taking A Biologic

Your doctor prescribed a biologic when NSAIDs alone didn’t work. But now the biologic is not easing your signs and symptoms either. It’s a frustrating situation, but there are more options you and your doctor can discuss.

I’m taking a TNFi, but it’s not working. What now?
If you began taking a TNFi but never saw improvement, you should speak to your doctor to understand why. If the inflammation never responded to a TNFi, experts suggest trying IL-17 inhibitors before trying a different TNFi.

If your TNFi improved your signs and symptoms at first but then stopped working or no longer worked as effectively, it’s recommended you try another TNFi.

Experts strongly recommend against trying a TNFi biosimilar of that same drug if the original TNFi stopped working.

There are other drugs including sulfasalazine (Azulfidine), methotrexate (Otrexup/Rheumatrex), or tofacitinib (Xeljanz), but these are recommended only when the drugs listed above are not good options.

What about steroids like prednisone? I’ve heard they can fight inflammation.
It is true that certain kinds of steroids have powerful anti-inflammatory effects. A particular category of steroids known as glucocorticoids—the most well-known of which are cortisone (Hydrocortisone) and prednisone (Deltasone)—are frequently used short-term to reduce peripheral (arm or leg) joint inflammation and treat iritis or inflammatory bowel disease.

However, experts strongly recommend against using oral or injectable systemic glucocorticoids (which impact the entire body), because they can have serious side effects, including increased risk of osteoporosis and fracture (already a risk in axial SpA), glaucoma, weight gain, adrenal gland problems, and complications related to blood sugar and diabetes. Local injections into inflamed joints are acceptable.

What kinds of tests can help me figure out what’s going on?
When doctors are unsure about the activity level of axial SpA, further assessments including an MRI exam may help provide more insight.

In Summary
It is our hope that this document will be a helpful resource for you and your friends and family as you talk with your doctor and make treatment decisions together. Though we have included a lot of information here, this document is meant to be an overview of the treatment recommendations.

A more comprehensive overview is available at spondylitis.org/Treatment-Information.
Many people contributed to the development of this document and their work is deeply appreciated. SAA thanks the volunteer task force behind this publication for their guidance, critical input and leadership, and thoughtful editing, as well as contributing writer, Scott Harris for helping bring this document to life.

Task Force Members/Editors:

Michael Pianin, JD – Chairman of the Task Force, Chairman of SAA’s Board of Directors, and co-author of the ACR/SAA/SPARTAN 2019 Updated axial SpA Treatment Recommendations.

Rose Bigham – Co-author of the ACR/SAA/SPARTAN 2019 Updated axial SpA Treatment Recommendations, SAA volunteer support group leader, and health advocate.

Jeanne Drennan, OT/L, CNMT – SAA volunteer support group leader, and health writer.

Maureen Dubreuil, MD, MSc – Co-author of the ACR/SAA/SPARTAN 2019 Updated axial SpA Treatment Recommendations, researcher, and rheumatologist.

Charis Hill – SAA Advocacy Committee member, freelance writer, and axial SpA & disability advocate.

Iain McDonald – SAA volunteer support group leader.

Arnold Podolsky, MD, JD – Member of SAA’s Board of Directors, and retired anesthesiologist.

David Yu, MD – Co-author of the ACR/SAA/SPARTAN 2019 Updated axial SpA Treatment Recommendations, and rheumatologist.

SAA also thanks our Medical and Scientific Advisory Board for their expertise and guidance, our members and donors for their invaluable input and support, and Eli Lilly and Company for its financial support of this educational material.

**Table 1. Medications**

<table>
<thead>
<tr>
<th>NSAIDs</th>
<th>TNF Inhibitors</th>
<th>IL-17 Inhibitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibuprofen (Motrin/Advil)</td>
<td>Adalimumab (Humira)*</td>
<td>Secukinumab (Cosentyx)</td>
</tr>
<tr>
<td>Naproxen (Aleve/Naprosyn)</td>
<td>Infliximab (Remicade)**</td>
<td>Lxekizumab (Taltz)</td>
</tr>
<tr>
<td>Meloxicam (Mobic)</td>
<td>Certolizumab Pegol (Cimzia)</td>
<td></td>
</tr>
<tr>
<td>Indomethacin (Indocin)</td>
<td>Golimumab</td>
<td></td>
</tr>
<tr>
<td>Diclofenac (Voltaren)</td>
<td>(Simponi/Simponi Aria)</td>
<td></td>
</tr>
<tr>
<td>Celecoxib (Celebrex)</td>
<td>Etanercept (Enbrel)***</td>
<td></td>
</tr>
<tr>
<td>Nabumetone (Relafen)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulindac (Clinoril)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piroxicam (Feldene)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etodolac (Lodine)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Others: Sulfasalazine (Azulfidine) or Methotrexate (Otrexup/Rheumatrex) can be considered for arthritis of the hands, feet and extremities, though these do not help the back. Tofacitinib (Xeljanz) can also be considered, though as of this writing, it has not been approved for axial SpA. It does have a small early clinical trial with positive results to date.

**Biosimilars:** As of the time of this publication, the following biosimilars have been approved by the U.S. Food and Drug Administration:

* Biosimilars for adalimumab (Humira): Amjevita (adalimumab-atto), Cylezo (adalimumab-adbm), Hyrimoz (adalimumab-adaz)

** Biosimilars for infliximab (Remicade): Inflectra (infliximab-dyyb), Renflexis (infliximab-abda), Lxifi (infliximab-qbtm)

*** Biosimilars for etanercept (Enbrel): Erelzi (etanercept-szzs), Eticovo (etanercept-ykro)

This list is changing all the time as new drugs reach the market. Please visit spondylitis.org/Medication-Guide for more detailed information on axial SpA medications.
The Spondylitis Association of America was the first, and remains the largest, resource in the U.S. for people affected by spondyloarthritis. For more than 35 years, SAA has dedicated all of its resources to funding medical research, education, advocacy, and supportive programs and services that directly benefit the spondyloarthritis community.

Contact SAA at info@spondylitis.org, or (800) 777-8189.

Visit us at spondylitis.org