WHAT IS PSORIASIS?

PSORIASIS is pronounced sore-EYE-ah-sis. It is an autoimmune disease, meaning that certain triggers cause the immune system to go into overdrive. This hyper activity can result in painful, scaly, inflamed patches of skin (plaques) that can interfere with functions as basic as walking and sleeping.

Psoriasis is a chronic (persistent) condition that is genetic in origin. It is not contagious, but it is lifelong. Psoriasis is the most common autoimmune disease in the United States, affecting approximately 7.5 million people.

Symptoms often appear sometime between the ages of 15 and 25, but the condition can develop at any age. Psoriasis occurs nearly equally in women and men and across all socioeconomic groups. It also is present in all racial groups, but at varying rates.

Though psoriasis varies from person to person, both in severity and how it responds to treatment, it’s almost always a game-changer: limiting people’s activities, plunging them into depression, and raising their risk for comorbidities (related illnesses) such as diabetes and heart disease. People with psoriasis may deal on a daily basis with pain and itch — as well as low self-esteem, relationship problems, and feeling stigmatized because of how they look.

Psoriasis is incurable, but there are a growing number of ways to treat it and manage the symptoms. Studies continue to show that treating the disease is your best bet to improve your quality of life and reduce the risk of developing comorbidities.
WHAT IS PSORIATIC ARTHRITIS?

PSORIATIC ARTHRITIS is a chronic, inflammatory disease of the joints and the places where tendons and ligaments connect to bone. This can result in pain, fatigue, stiffness and swelling. People with psoriatic arthritis may find many of their usual activities restricted by the disease. Like psoriasis, psoriatic arthritis is not contagious. It’s also lifelong.

About a third of all of people with psoriasis end up with psoriatic arthritis, but the severity of one does not dictate the severity of the other. Psoriatic arthritis can develop at any age, though it commonly appears between the ages of 30 and 50. For most people with this condition, it appears about 10 years after the onset of psoriasis.

There is no specific test for diagnosing psoriatic arthritis. A diagnosis is based mostly on symptoms. These are among the most common:

- Stiffness, pain, throbbing, swelling and tenderness in one or more joints
- Tenderness, pain and swelling over tendons
- Swollen fingers and toes
- Reduced range of motion
- Morning stiffness
- Nail changes: the nail separates from the nail bed, becomes pitted, or mimics fungus infections
- Redness and pain of the eye, such as conjunctivitis
- Generalized fatigue

It’s extremely important to talk to your health care provider about these symptoms, especially if you already have psoriasis or if any of your family members have psoriasis or psoriatic arthritis. Left untreated, psoriatic arthritis can cause permanent joint damage. Though there is no cure, there are a growing range of treatments available that can help you deal with pain, protect your joints and preserve your range of motion.
Just like psoriasis, psoriatic arthritis ranges from mild to severe. Your rheumatologist will consider the number of joints affected and your prognosis when recommending a particular treatment plan. Even a small number of inflamed joints, however, can have a profound impact on pain and function, and can impact treatment decisions.

Psoriatic arthritis of a mild form is sometimes referred to as oligoarticular, meaning it affects four or fewer joints in the body. Others may have a more severe polyarticular form (affecting four or more joints). All types of psoriatic arthritis are characterized by pain, swelling and stiffness in the joints.

Psoriatic arthritis can involve the peripheral joints (the joints of your arms and legs, including the elbows, wrists, hands and feet) or, less commonly, the spine, hips and shoulders.

**Spondylitis** is inflammation of the spinal column. It commonly occurs with other forms of psoriatic arthritis. The main symptoms are inflammation with stiffness of the neck, lower back and sacroiliac (hips) joints. It is worse in the morning and after rest, and improves with movement and activity. Spinal arthritis makes motion in these areas painful and difficult.

**Enthesitis** refers to inflammation of entheses, the site where ligaments or tendons insert into the bones. Common locations for enthesitis to occur include the bottoms of the feet (plantar fascia), the Achilles’ tendons, and the places where ligaments attach to the elbow, knee, ribs, spine and pelvis.

Enthesitis is a distinctive feature of psoriatic arthritis and does not occur with other forms of arthritis like osteoarthritis. It can be a source of significant pain because your muscles pull on the entheses with most daily activities.
**Dactylitis**, or “sausage digits,” refers to inflammation/swelling of an entire finger or toe. It occurs due to inflammation of the small joints and enthesitis of the surrounding tendons. Dactylitis is another distinguishing factor of psoriatic arthritis. Usually dactylitis involves a few fingers and/or toes asymmetrically.

## Diagnosis of Psoriatic Arthritis

Psoriatic arthritis can develop slowly with mild symptoms, or it can arise quickly and with severe widespread joint pain and swelling.

Early recognition, diagnosis and treatment of psoriatic arthritis can help prevent or limit extensive joint damage that can occur at any stage of the disease. The range of symptoms is wide and includes not only tender and swollen joints, but also swollen and tender entheses, back pain, morning stiffness and fatigue. Nail changes are common. These can look like a fungal infection and the nail may separate from the nail bed and/or become pitted. Other symptoms of psoriatic arthritis include:

- Reduced range of motion
- Swelling of an entire finger or toe (called dactylitis, as described above)
- In more chronic situations, joint deformity can occur

Psoriatic arthritis is a systemic disease, which means that it can affect organs and structures in the body other than the joints. Symptoms of such involvement can include:

- Redness and pain in one or both eyes, accompanied by blurry vision due to eye inflammation (uveitis)
- Psoriasis of the skin (this can be mild)
or severe)

- General fatigue
- Abdominal pain or diarrhea due to inflammation of the bowel
- Chest pain with exercise or other signs of cardiovascular disease

The disease can develop in a joint after an injury and may mimic a cartilage tear. The diagnosis of psoriatic arthritis may sometimes be made only after repeated episodes. Muscle or joint pain can occur with or without joint inflammation (swelling). You may experience tendonitis and bursitis.

In 85 percent of individuals, skin disease comes before joint disease, sometimes by up to 10 years. It is important to note that having a severe case of psoriasis does not necessarily mean a person will develop a severe case of psoriatic arthritis. A person could have few skin lesions, but have many joints affected by arthritis. You should tell your dermatologist if you have any persistent pain near a joint or tendon.

**Tests to confirm the diagnosis**

If you suffer from persistent joint and/or tendon pain, you should alert your primary care doctor and dermatologist. You may need to be evaluated by a rheumatologist, a doctor who specializes in arthritis.

There is no definitive test for psoriatic arthritis. The diagnosis is usually based on the presence of inflammatory arthritis, spinal disease or enthesitis and the presence of psoriasis, with or without nail lesions. Medical history, physical examination, blood tests, MRIs and X-rays of the joints may be used to diagnose psoriatic arthritis. It is important to tell your doctor about your history of psoriasis. The symptoms of psoriatic arthritis are similar to three other arthritic diseases: rheumatoid arthritis, gout and reactive arthritis.
Treatment for psoriatic arthritis can relieve pain, reduce swelling, help keep joints working properly, and possibly prevent further joint damage. Doctors will recommend treatments based on the type of psoriatic arthritis, its severity and an individual’s response to treatment. Having your dermatologist and rheumatologist work as a team to address both your skin and joint symptoms is critical to proper disease management.

Early diagnosis and treatment can help slow the disease and preserve function and range of motion. Some early indicators of severe disease include onset at a young age, having many joints involved and spinal involvement. Good control of the skin disease can help you manage psoriatic arthritis. Some treatments are approved to treat both psoriasis and psoriatic arthritis.

Drugs for the treatment of psoriatic arthritis can be divided into several categories:

- **Nonsteroidal anti-inflammatory drugs (NSAIDs)** include over-the-counter medications such as aspirin and ibuprofen, as well as prescription-strength products.
- **Disease-modifying antirheumatic drugs (DMARDs)** may relieve more severe symptoms and attempt to slow or stop joint damage and the progression of psoriatic arthritis. These are available by prescription.
- **Biologic drugs** such as Enbrel, Humira, Remicade, Simponi, and Stelara are highly selective agents that target specific parts of the immune system that cause psoriasis and
psoriatic arthritis. These are available by prescription.

• An **oral treatment** called Otezla targets molecules that control inflammation inside immune cells.

The following treatments are not listed in any order of importance. Talk with your doctor about the risks and benefits to you of a particular therapy. Check with your health care provider or pharmacist for any potential interactions with other medications.

**Aspirin and NSAIDs**

Prescription and nonprescription NSAIDs are effective for many people with psoriatic arthritis. They help control swelling, pain, morning stiffness and help improve range of motion in joints. They can help reduce the limitations on daily activities often caused by arthritis.

A partial list of NSAIDs includes:

• Clinoril (sulindac)
• Celebrex (celecoxib)
• Daypro (oxaprozin)
• Feldene (piroxicam)
• Indocin (indomethacin)
• Lodine (etodolac)
• Mobic (meloxicam)
• Motrin, Advil (ibuprofen)
• Aleve, Anaprox, Naprelan, Naprosyn (naproxen)
• Orudis (ketoprofen)
• Relafen (nabumetone)
• Tolectin (tolmetin sodium)
• Voltaren, Arthrotec (diclofenac)

You and your doctor should decide together which NSAID is right for you. NSAIDs and aspirin generally do not significantly alter psoriasis skin lesions. Acetaminophen (Tylenol) may be added for pain relief; however, acetaminophen does not relieve inflammation, just pain. A
Doctor considers stronger medications when NSAIDs and aspirin fail to work or progression of the disease is evident. Aspirin can help reduce pain, swelling and stiffness. To work as an anti-inflammatory, aspirin must be taken in high doses. Due to the toxicity of high doses of aspirin, it is not a common choice in treating inflammation.

Some NSAIDs, when taken in high doses or over long periods, carry a potential risk of causing stomach problems such as ulcers and gastrointestinal bleeding. The risk can be greater in certain people:

- ages 60-65
- use steroids or Coumadin (warfarin)
- have previous ulcer history
- have multiple other medical conditions

Patients with heart failure, coronary disease or kidney problems should not take these medications. It is important to remember that prescription NSAIDs should never be combined with over-the-counter NSAIDs such as ibuprofen (Advil, Motrin and others) or naproxen (Aleve), including when those drugs are combined with other medicines, such as in cold remedies.

**DMARDs**

**Antimalarials**

Antimalarial treatment, commonly used with success in rheumatoid arthritis, sometimes is used to treat psoriatic arthritis.

Antimalarials are usually given as one or two pills, once a day. It may take many weeks before seeing benefits. Individuals taking an antimalarial should have eye examinations periodically. The most commonly prescribed antimalarial is Plaquenil (hydroxychloroquine). Some antimalarials may worsen the skin disease in certain individuals. Talk to your doctor about the
available antimalarial treatments and alternatives.

**Methotrexate**
Methotrexate, an immunosuppressive drug, is FDA-approved for the treatment of psoriasis. It is the most commonly used DMARD for treating psoriatic arthritis and rheumatoid arthritis. There have not been controlled studies to show that methotrexate is effective for treatment of psoriatic arthritis. However, doctors and researchers have observed that methotrexate is helpful in many patients.

Methotrexate usually is well-tolerated at low doses. However, it has a number of potential side effects and the long-term possibility of liver damage.

**Leflunomide**
Leflunomide (brand name Arava) is a drug used to treat rheumatoid arthritis, ankylosing spondylitis and psoriatic arthritis. Arava, which comes in pill form, helps relieve symptoms and prevents damage. Blood tests must be performed periodically due to potential, but rare, liver disease.

**Sulfasalazine**
Sulfasalazine, a sulfa drug developed to treat inflammatory bowel diseases, is sometimes used for psoriatic arthritis. Approximately one-third of individuals with mild psoriatic arthritis respond rapidly to this treatment (usually within four to eight weeks).

Sulfasalazine is given twice a day. Use of sulfasalazine is not recommended in individuals with sulfa allergies, people with intestinal or urinary obstructions and individuals suffering from porphyria, a metabolic disease. A doctor may require regular blood tests while an individual is on sulfasalazine to monitor cell counts and liver enzymes. Possible side effects include nausea, rash, headache, abdominal pain, vomiting, fever and dizziness.
Cyclosporine
Cyclosporine is an immunosuppressive drug that is FDA-approved for treating psoriasis but is rarely used for psoriatic arthritis. No controlled studies have been done to evaluate cyclosporine used alone, but it may produce improvement in psoriatic arthritis. Periodic blood tests are required due to the possibility of kidney damage.

Corticosteroids
Steroid medications taken by mouth or injection are not generally recommended for long-term treatment of psoriatic arthritis. In some circumstances, they may be needed for relief of acute, severe joint inflammation and swelling. For the most part, large doses of steroids should be avoided. Psoriasis lesions may potentially become worse after the steroid treatment is stopped. Steroids have several adverse side effects when taken over a long period of time, including diabetes, increased risk of infection, cataracts and cardiovascular disease.

Systemic steroids can cause flare-ups of severe psoriasis, such as pustular psoriasis. However, selective low-dose steroid injections to inflamed joints, tendons and the area around joints can improve range of motion.

Acthar
Another therapy that may be used for relief of acute, severe joint inflammation and swelling is Acthar, a corticotropin that may help your body produce its own natural steroid hormones which help your body regulate inflammation. Acthar is injected beneath the skin or into the muscle for short-term treatment as prescribed by your provider. Acthar can cause side effects similar to those associated with steroid treatments.

Biologics
Biologic drugs are given by injection or intravenous infusion. A biologic is a drug derived from living cells cultured in a laboratory. They
work by targeting specific parts of the immune system that are linked to psoriasis and psoriatic arthritis inflammation.

All biologics carry the risk of side effects, including infections, flu-like symptoms and injection site reactions. Rare side effects include certain types of cancer and blood disorders. You should not take biologics if your immune system is significantly compromised or if you have an active infection. You should be screened for tuberculosis and other infections before starting most biologics.

**Cimzia**

Cimzia (generic name certolizumab pegol) is a biologic medication approved in September 2013 by the FDA for the treatment of active psoriatic arthritis. It is also approved for treating rheumatoid arthritis, ankylosing spondylitis and Crohn’s disease.

Cimzia is injected under the skin at home or by a health care provider. It is designed to be taken continuously to maintain improvement. Cimzia blocks tumor necrosis factor-alpha (TNF-alpha), a chemical messenger in the immune system that signals other cells to cause inflammation. Cimzia helps lower the amount of TNF-alpha, thus interrupting the inflammatory cycle of psoriatic arthritis.

**Enbrel**

The drug Enbrel (generic name etanercept) was approved in January 2002 for individuals with moderate to severe psoriatic arthritis. The FDA originally approved Enbrel for rheumatoid arthritis in 1998. It is also approved for ankylosing spondylitis and juvenile idiopathic arthritis. Enbrel was FDA-approved in April 2004 for treating psoriasis.

Studies have shown that Enbrel reduced the progression of joint damage for two years among
people with psoriatic arthritis. Enbrel helps reduce inflammation and psoriasis skin lesions. Treatment with Enbrel consists of weekly self-injections under the skin.

Like Humira, Cimzia, Remicade, and Simponi; Enbrel works by suppressing TNF-alpha.

**Humira**

Humira (generic name adalimumab) is a biologic medication approved by the FDA in October 2005 to treat psoriatic arthritis. It is also approved to treat rheumatoid arthritis, juvenile idiopathic arthritis, ankylosing spondylitis and Crohn’s disease. It was approved to treat psoriasis in January 2008.

The drug is injected under the skin by the individual. Humira can help limit joint damage, reduce inflammation and psoriasis skin lesions.

Humira works by suppressing the effect of TNF-alpha.

**Remicade**

Remicade (generic name infliximab) was approved by the FDA in May 2005 to treat psoriatic arthritis. Remicade is also approved for ankylosing spondylitis, ulcerative colitis, rheumatoid arthritis and Crohn’s disease. In September 2006, it was approved to treat psoriasis. Remicade may help reduce further joint damage, while reducing inflammation and psoriasis skin lesions.

The dosage of Remicade is based on the patient’s weight. During an infusion, the individual sits in a chair or lies on an examination table and the medication is given by intravenous therapy (IV) over the course of about two hours.

Remicade is an anti-TNF-alpha drug.
Simponi
Simponi (generic name golimumab) was approved by the FDA in April 2009 to treat adults with moderate to severe psoriatic arthritis. It is also approved to treat rheumatoid arthritis and ankylosing spondylitis.

Simponi is a self-injectable medication (subcutaneous self-injection). Simponi helps relieve pain, stiffness, swelling of joints and skin symptoms of psoriasis. Like Enbrel, Humira and Remicade, Simponi blocks the effects of TNF-alpha.

Stelara
Stelara (generic name ustekinumab) was approved by the FDA in September 2013 to treat adults with moderate to severe psoriatic arthritis. It was approved to treat psoriasis in September 2009.

Stelara is given by an injection under the skin. Stelara is administered by a health care provider. You also can self-inject after proper training. Your health care provider will choose the exact dose of Stelara and decide how often you should receive it.

Stelara works by targeting the cytokines interleukin-12 (IL-12) and interleukin-23 (IL-23), which are other forms of “cellular messengers” produced by immune cells believed to play a role in psoriasis and psoriatic arthritis.

ORAL TREATMENT
Otezla
Otezla (generic name apremilast) is an oral treatment option approved by the FDA to treat psoriatic arthritis and psoriasis in 2014. Otezla is available as a tablet taken by mouth.

Otezla works by selectively targeting molecules inside immune cells to correct the overactive immune response that causes inflammation in people with psoriasis and psoriatic arthritis.
This leads to improvement in joint tenderness, swelling and skin symptoms.

Many people experience diarrhea or other abdominal complaints when starting this medicine, but those symptoms tend to improve over time.

**For More Information**
To learn more about these treatments, please visit www.psoriasis.org. Be sure to discuss the risks and benefits of these medications with your rheumatologist or dermatologist. Your health care provider will order blood tests to ensure your chosen treatment is safe and appropriate.

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**OTHER TREATMENT OPTIONS**

**Diet and climate**
There are no studies that show that changing your diet is an effective treatment for psoriatic arthritis. However, maintaining a healthy body weight can make your treatment more effective. Additionally, a warm, stable climate may improve disease symptoms.

**Exercise**
Exercise helps preserve strength and maintain range of motion of the joints. Isometric exercise, such as certain types of yoga moves, are often prescribed because they improve mobility and are less damaging to inflamed joints. A range-of-motion program should be coupled with a stretching program. Stretching exercises are part of the treatment and are especially useful for spinal arthritis.

You should not experience pain lasting for more than two hours after exercise. If you do, take it
easier next time or choose a different exercise.

Rehabilitation
Physical therapy and rehabilitation can increase the function of an arthritic joint and improve overall conditioning. Rehabilitation frequently involves general exercise to help maintain cardiovascular fitness, proper positioning of joints to assist with movement, and coping strategies to help individuals continue or return to work.

Splints
In addition to exercise and local pain therapy, you may use a splint to support a joint to improve function and relieve pain and swelling. How long you will wear a splint may vary depending on the joint that is affected.

Surgery
Surgery can help people whose joint destruction limits motion and function despite medical treatment.

Other tips
Heat, cold and rest are used to relieve pain. Immobilizing an inflamed swollen area while using cold packs can reduce the swelling and improve range of motion. Heat helps painful joints and decreases joint stiffness. Follow your health care provider’s directions.

Osteoporosis, the thinning of bone tissue with loss of bone density over time, may occur with arthritis—especially with psoriatic spondylitis (inflammation of the spine). Minor traumas may cause fractures. Prolonged use of corticosteroids and inactivity can potentially accelerate osteoporosis. Calcium supplements along with vitamin D help prevent it in people who are at risk. In addition, you may want to consider talking to your health care provider about using biphosphonates and other prescription drugs that affect calcium
metabolism and bone formation. Avoid prolonged bed rest unless directed by a doctor.

People with chronic inflammatory conditions like psoriasis and psoriatic arthritis are at an increased risk of developing comorbidities, or additional medical conditions, like cardiovascular disease and metabolic syndrome—a cluster of conditions such as obesity, abnormal blood cholesterol levels, high blood pressure and diabetes or insulin resistance. Talk with your health care team about your specific risk factors for developing these conditions and take steps to get screened if appropriate.

HELP FOR FEET

Foot and ankle arthritis is common in psoriatic arthritis. It can cause a great deal of pain. “Sausage” toes are swollen, painful and do not fit into standard shoes. A shoe with a high toe box or an extra-depth shoe can provide relief. Shoe inserts, heel cups and/or pads also may be used in shoes to relieve pain from heel spurs, plantar fascitis and arthritis in other areas of the foot. A podiatrist, a doctor who specializes in the treatment of feet, may be able to provide additional help for people with psoriatic arthritis of the feet and ankles.
BILL OF RIGHTS AND RESPONSIBILITIES

For People with Psoriasis and Psoriatic Arthritis

01. You have the right to receive medical care from a health care provider who understands that psoriasis and psoriatic arthritis are serious autoimmune diseases that require lifelong treatment.

02. It’s your responsibility to get involved in managing your disease by participating in health care decisions, following treatment plans and making healthy lifestyle choices.

03. You have the right to a health care provider who can fully assess your disease and related conditions, knows the benefits and risks of treatments and medications, and readily coordinates treatment plans with your other providers.

04. It’s your responsibility to be honest with your health care provider about any health and lifestyle decisions that may affect the success of your treatment plan.

05. You have the right to clear or almost clear skin with effective treatment throughout your lifetime. Seek another health care provider if your current provider is not comfortable prescribing and monitoring psoriatic disease treatments.
06. It’s your responsibility to ask for support and encouragement from your loved ones, your doctors, and anyone else you feel comfortable with discussing personal and health issues.

07. You have the right to be treated in a courteous and nondiscriminatory manner by health care providers, employers and others.

WE’RE HERE FOR YOU

At NPF, our priority is giving you the information and services you need to take control of your psoriasis and/or psoriatic arthritis, while funding research to find a cure.

Research

Finding a cure for psoriasis and psoriatic arthritis is our highest priority. We’re working for you by:

- Funding promising new studies through our Discovery and Translational grants programs
- Increasing the number of scientists doing research through our Medical Dermatology Fellowship program
- Hosting the world’s largest collection of psoriasis DNA for genetic research

Advocacy

We’re ensuring that people with psoriasis and psoriatic arthritis have a say in the policies that affect their lives. Join us as we:

- Work to increase federal funding for psoriasis and psoriatic arthritis research
- Improve access to health care for patients
Health education

NPF is your one-stop shop for news and information about psoriasis and psoriatic arthritis. Visit www.psoriasis.org to learn more about:

- The latest treatment information and research updates
- Health events in your area

Connection

Sometimes the best resource to manage psoriasis and psoriatic arthritis is another person with your condition. Share information and get support from:

- TalkPsoriasis.org, the largest online community for people affected by psoriasis and psoriatic arthritis
- Psoriasis One to One mentor program: www.psoriasis.org/one-to-one
- Team NPF Walk, Run, Ride and DIY events: www.teamnpf.org

Learn more

Find more information and resources at www.psoriasis.org.
NPF is a 501 (c) (3) charitable organization governed by a volunteer Board of Directors and advised on medical issues by a volunteer Medical Board. NPF’s educational materials are reviewed by members of our Medical Board and are not intended to replace the counsel of a physician. NPF does not endorse any medications, products or treatments for psoriasis or psoriatic arthritis and advises you to consult a physician before initiating any treatment.

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Become a member of the National Psoriasis Foundation and get the tools and information you need to manage your psoriasis and/or psoriatic arthritis. As a member, you’ll receive a full year of Psoriasis Advance magazine and other benefits and services designed to help you live well with psoriatic disease.

Yes, I want to join the National Psoriasis Foundation. Please send me a bill for $35. For faster service, join online at www.psoriasis.org or call 800-723-9166.

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