



# Women and Autoimmune Diseases

Did you know that nearly 80 percent of patients diagnosed with an autoimmune disease are women?<sup>1</sup> The causes of these diseases are not well understood; there are no known cures and treatment can be extremely expensive.

What puts women at higher risk for autoimmune diseases? There are a number of theories, but no definitive answers. Many scientists focus on the differences in chromosomes between men and women. Men have an X and a Y chromosome, while women have two copies of the X chromosome. The X chromosome has roughly 15 times the number of genes coded for proteins as the Y.<sup>2,3</sup> Researchers theorize that the larger number of genes on the X chromosomes increases the possibility of more mutations – putting women at higher risk for certain diseases.

Hormones may also play a role. During their lifetime, women have more hormonal changes than men, whether it be during puberty, childbirth, or menopause. Scientists have hypothesized that these changes can trigger the development or exacerbation of autoimmune diseases.<sup>4</sup>

**80%**  
of autoimmune  
patients are  
women

[Learn about \*\*strategies to manage costs for autoimmune conditions\*\* >>](#)

Among women, the five most common autoimmune diseases are lupus, multiple sclerosis, thyroid diseases, rheumatoid arthritis, and psoriasis.<sup>5</sup> Two of the autoimmune diseases most prevalent in Caremark member populations are psoriasis and rheumatoid arthritis (RA).

## Psoriasis

It's estimated that 7.5 million adults, or more than 3 percent of the U.S. adult population, has psoriasis.<sup>6</sup> Plaque psoriasis is the most common form, affecting 80 to 90 percent of patients. With rare exceptions, psoriasis is not life-threatening – but it can certainly be debilitating. It's characterized by scaly, itchy plaques on the skin – mostly on the back, elbows, knees, and scalp.<sup>7</sup> In addition to the physical symptoms, having psoriasis can affect a patient's emotional health, relationships, and ability to handle stress.<sup>8</sup> This is especially true in women with psoriasis, who have been shown to have a higher incidence of depression and quality-of-life issues.<sup>9</sup>



Three-year  
treatment costs  
for psoriasis  
range from  
**\$5,000 to  
\$180,000**

For mild cases, treatment may be as simple as an over-the-counter topical or UV light therapy. There are also a range of medications that can be effective. But treatment costs vary widely, from \$5,000 for three years of at-home phototherapy, to more than \$180,000 for the most expensive biologic.<sup>10</sup> **Virtual care** can provide a cost-effective pathway to treatment.

[Learn how \*\*we help clients manage psoriasis costs\*\* >>](#)

# Rheumatoid arthritis (RA)

Rheumatoid arthritis affects more than 1.3 million Americans – and nearly three-quarters of them are women. Symptoms include swollen, stiff joints and chronic inflammation. These can cause a deterioration of the soft tissue lining the joints and tendons, which compromises movement and flexibility. And sometimes RA can even affect other organs, such as the eyes, skin, or lungs.<sup>11</sup>

While there is no cure for rheumatoid arthritis, there are treatments that can provide significant relief of symptoms and preserve near-normal function. But treatment can be complex and expensive. In fact, RA contributes an estimated \$22.3 billion in annual U.S. health care costs.<sup>12</sup>

## 43% of patients

had to try three biologics before finding one that works



The baseline therapy for RA is a class of drugs called DMARDs – disease-modifying antirheumatic drugs. These medications can relieve symptoms and slow the progression of joint damage. There are two types of DMARDs – traditional non-biologic DMARD therapy costs about \$1,100 per year per patient, while biologic DMARDs can cost up to \$38,000 per year.<sup>13</sup>

Clinical guidelines recommend that newly diagnosed RA patients try a first-line therapy, such as a traditional DMARD, before progressing to a biologic medication. Unfortunately, some patients don't follow this course. Many patients also have to try several different medications before finding one that works for them. In fact, one survey found that almost half of patients tried at least two biologics,<sup>14</sup> while 43 percent had to try three. Such “cycling” is complicated and can also lead to wasteful spending.

[Learn how we help clients manage RA costs >>](#)

## Looking ahead

Given the prevalence of autoimmune diseases in the population, it is likely that we will continue to see innovations in therapies and treatments. At CVS Caremark, we continue to monitor what's in the pipeline so we can help payors stay ahead of the curve.

For rheumatoid arthritis patients, there is hope that new types of testing may help indicate which biologic is most likely to be effective. If we're able to personalize treatments, we may achieve both improved outcomes and cost savings for patients and payors.

We expect to see a wave of new biosimilar medications to treat autoimmune conditions. Biosimilars are medications that have no clinically meaningful differences with their reference biologic medications but cost significantly less. The first biosimilar to Humira has already been approved, with several more in the drug pipeline. Humira can be used for the treatment of both RA and psoriasis.

[Learn how biosimilars may lower specialty costs >>](#)

**CVS Caremark is committed to helping women meet their unique health care needs.** We continue to monitor scientific developments and changes in the marketplace to ensure members have access to clinically appropriate and effective treatments and tools. We are also vigilant in balancing the needs of patients and payors to achieve both better health outcomes and lower costs.



**Healthier happens together™**

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The source for data in this document is CVS Health Enterprise Analytics, unless otherwise noted. Adherence results and savings may vary based upon a variety of factors such as plan design, demographics and programs adopted by the plan. Client-specific modeling available upon request. CVS Health uses and shares data as allowed by applicable law, our agreements, and our information firewall.

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