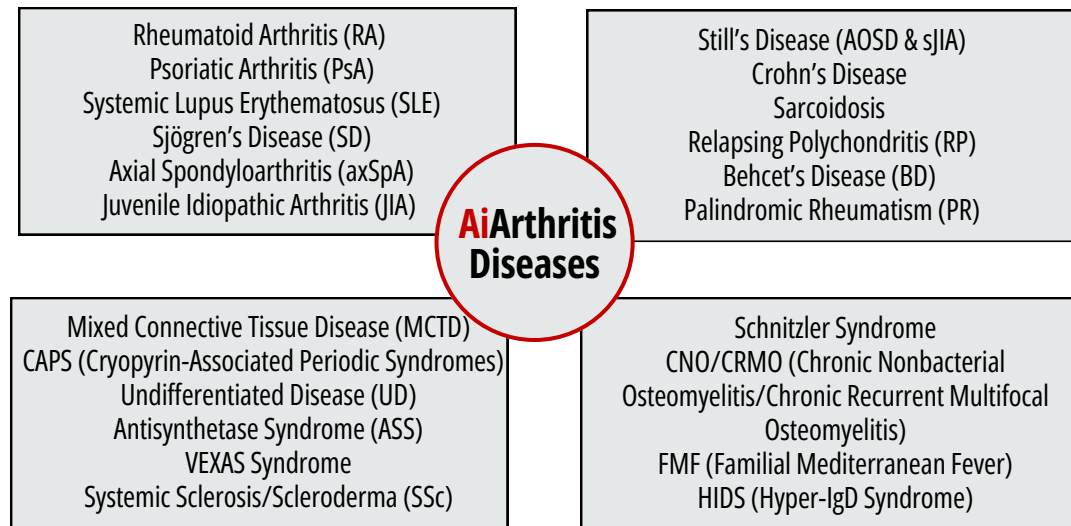


What Are **Ai**Arthritis Diseases?

There are over 100 “auto” diseases, but not all include both “auto” and inflammatory arthritis.

AiArthritis refers to inflammation-driven arthritis linked to **autoimmune** and **autoinflammatory** diseases, where the immune system mistakenly attacks the body’s healthy tissues. These diseases affect not only the joints but also the entire body, including organs and tissues, due to systemic inflammation. Autoimmune diseases, involving the adaptive immune system, are influenced by genetic and environmental factors, while autoinflammatory diseases result from innate immune system reactions, often driven by genetic mutations.

Over 300 million people worldwide are diagnosed with AiArthritis diseases, but the true number may be closer to 450 million due to undiagnosed or undifferentiated cases.



“
Do not compare your disease to those of others. Your symptoms are valid. Your experience is yours alone but you’re not alone.

-Lisa C (AiArthritis Volunteer, Person Living with Rheumatoid Arthritis)

”

**WORDS FROM A FELLOW
AiARTHRITIS PATIENT**

Typical “Auto” Symptoms



Inflammatory Arthritis Symptoms



Common in All AiArthritis Diseases



Severe fatigue that isn’t alleviated by rest or stimulants.



Brain fog: also known as cognitive dysfunction, making it difficult to think or concentrate.



Flu-like symptoms without having the flu, including nausea, muscle weakness, and malaise.



Fever: Low-grade in autoimmune diseases (except juvenile idiopathic arthritis), higher in autoinflammatory.



Severe joint stiffness, especially in the morning or after long periods of inactivity. Episodes of joint pain that may last hours to weeks and can shift locations (“jumping pain”).



Inflammatory Arthritis symptoms often coincide with “Auto” symptoms and can flare up suddenly without a clear cause.



Flares: Periods of worsening symptoms that can last hours, days, weeks, or months.



Improvement with Activity: Symptoms improve with exercise and worsen with rest.



Comorbidities: Uncontrolled inflammation can lead to comorbidities, with 70% of patients developing additional diagnoses.



Family history: Autoimmune diseases often run in families due to genetic predisposition, while autoinflammatory diseases result from gene mutations that can be inherited and cause disease.

Cryopyrin-Associated Periodic Syndromes (CAPS)



How to pronounce it:

Cryopyrin - cry-oh-pEYE-rin

Cryopyrin-Associated Periodic Syndromes (CAPS) are a group of rare genetic disorders characterized by recurrent episodes of inflammation and related symptoms. CAPS is caused by mutations in the NLRP3 gene, which provides instructions for making a protein called cryopyrin. Cryopyrin is involved in the regulation of the immune system, specifically in the process of inflammation



Symptoms Often Associated with Cryopyrin-Associated Periodic Syndromes

These symptoms are in addition to those common in all AiArthritis diseases

There are three main conditions within the CAPS spectrum, which vary in terms of severity:



Familial Cold Autoinflammatory Syndrome (FCAS): This is the mildest form of CAPS. Symptoms are triggered or worsened by exposure to cold temperatures. Patients experience rash, fever, joint pain, and other signs of inflammation during these episodes.



Muckle-Wells Syndrome (MWS): MWS is a moderate form of CAPS. Symptoms are more persistent and may not always be triggered by cold exposure. Patients with MWS experience recurrent fever, rash, joint pain, and eye redness. Progressive hearing loss can also occur. Chronic Infantile Neurological, Cutaneous, and Articular Syndrome (CINCA) or Neonatal-Onset



Multisystem Inflammatory Disease (NOMID): CINCA/NOMID is the most severe form of CAPS. Symptoms begin in infancy and include rash, joint swelling, chronic meningitis, and skeletal abnormalities. Neurological symptoms are also common, leading to developmental delays.



FCAS: Rash triggered by cold, muscle aches, eye redness



MWS: Skin lesions, cold sensitivity, amyloidosis, hearing loss



CINCA/NOMID: Non-itchy hives, headaches, bulging eyes, organ inflammation, hearing loss, developmental delays



Diagnosing Cryopyrin-Associated Periodic Syndromes



Diagnosis often involves genetic testing, physical exams, imaging (like MRIs) blood & urine tests, and reviewing family history.



Genetic testing is often critical in diagnosing CAPS, as it can identify mutations in the NLRP3 gene.



Possible additional testing:

- skin biopsy
- lumbar puncture
- hearing test
- vision test



Origin of Cryopyrin-Associated Periodic Syndromes

CAPS was identified in the early 2000s as a group of related autoinflammatory disorders caused by mutations in the NLRP3 gene, which affects the cryopyrin protein. The name reflects the shared cause ("Cryopyrin-Associated") and the recurring nature of the inflammatory symptoms.



AiArthritis Disease Treatment Options



CAPS Webpage



Patient Journey Resources