

Ilaris® (canakinumab)

When requesting Ilaris® (canakinumab), the individual requiring treatment must be diagnosed with an FDA-approved indication and meet the specific coverage guidelines and applicable safety criteria for the covered indication.

FDA-Approved Indications

Ilaris is indicated for the treatment of:

- Cryopyrin-Associated Periodic Syndromes (CAPS) including Familial Cold Autoinflammatory Syndrome, Muckle-Wells Syndrome, and Neonatal Onset Multisystem Inflammatory Disease (NOMID) or Chronic Infantile Neurological Cutaneous and Articular (CINCA) Syndrome
- Tumor Necrosis Factor (TNF) Receptor Associated Periodic Syndrome (TRAPS)
- Hyperimmunoglobulin D (Hyper-IgD) Syndrome (HIDS)/Mevalonate Kinase Deficiency (MKD)
- Familial Mediterranean Fever (FMF)
- Active Systemic Juvenile Idiopathic Arthritis (sJIA) in patients 2 years of age and older
- Adult onset Still's Disease

Coverage Guidelines

The individual must meet all the following criteria for initial authorization of select indications:

Cryopyrin-Associated Periodic Syndromes (CAPS)

- Is 4 years of age or older;
- Ilaris is prescribed by or in consultation with a rheumatologist, geneticist, allergist, immunologist, or dermatologist.

Familial Mediterranean Fever (FMF)

- Is 2 years of age or older;
- Has tried colchicine, unless contraindicated;
- Will be taking Ilaris in combination with colchicine, unless colchicine is contraindicated or not tolerated;
- Prior to starting Ilaris, C-reactive protein level is ≥ 10 mg/L OR elevated at least two times the upper limit of normal;
- Has a history of at least one flare per month despite use of colchicine OR has been hospitalized for a severe flare;
- Ilaris is prescribed by or in consultation with a rheumatologist, nephrologist, geneticist, gastroenterologist, oncologist, or hematologist.

Hyperimmunoglobulin D syndrome (HIDS)/Mevalonate Kinase Deficiency (MKD)

- Is 2 years of age or older;
- Prior to starting Ilaris, C-reactive protein level is ≥ 10 mg/L OR elevated at least two times the upper limit of normal;
- Has a history of at least three febrile acute flares within the previous 6-month period OR has been hospitalized for a severe flare;
- Ilaris is prescribed by or in consultation with a rheumatologist, nephrologist, geneticist, oncologist, or hematologist.

Tumor Necrosis Factor Receptor Associated Periodic Syndrome (TRAPS)

- Is 2 years of age or older;
- Prior to starting Ilaris, C-reactive protein level is ≥ 10 mg/L OR elevated at least two times the upper limit of normal;
- Has a history of at least six flares per year OR has been hospitalized for a severe flare;
- Ilaris is prescribed by or in consultation with a rheumatologist, nephrologist, geneticist, oncologist, or hematologist.

Systemic Juvenile Idiopathic Arthritis (sJIA)

- Is 2 years of age or older;
- Ilaris is prescribed by or in consultation with a rheumatologist;
- Meets one of the following conditions:
 - o Has tried at least 2 other biologic agents (e.g., tocilizumab, Kineret, abatacept, etanercept, adalimumab, infliximab); OR
 - o Has features of poor prognosis (e.g., arthritis of the hip, radiographic damage, active systemic disease such as fever, elevated inflammatory markers, or requirement for treatment with systemic glucocorticoids) and has tried Actemra or Kineret; OR
 - o Has active systemic features with concerns of progression to macrophage activation syndrome (MAS) and has tried Kineret.

Still's disease, Adult onset

- Is 18 years of age or older;
- Ilaris is prescribed by or in consultation with a rheumatologist;
- Meets one of the following conditions:
 - o Has tried at least 2 other biologic agents (e.g., tocilizumab, Kineret, abatacept, etanercept, adalimumab, infliximab); OR
 - o Has features of poor prognosis (e.g., arthritis of the hip, radiographic damage, active systemic disease such as fever, elevated inflammatory markers, or requirement for treatment with systemic glucocorticoids) and has tried Actemra or Kineret; OR
 - o Has active systemic features with concerns of progression to macrophage activation syndrome (MAS) and has tried Kineret.

Note: If the patient is <18 years of age, refer to criteria for systemic juvenile idiopathic arthritis (sJIA)

The individual must meet all the following criteria for reauthorization (all indications):

- Has been established on Ilaris therapy for at least 6 months; *Note: A patient who has received < 6 months of therapy, or who is restarting therapy with Ilaris, is reviewed under initial authorization criteria.*
- Meets one of the following;
 - o Has experienced an improvement in at least one objective measure compared with baseline (e.g., resolution of fever, improvement in rash or skin manifestations, improvement of serum markers [e.g., C-reactive protein, amyloid A]); OR
 - o Has experienced an improvement in at least one symptom compared with baseline (e.g., less joint pain/tenderness, stiffness, or swelling, improved function or activities of daily living).

Approval duration (initial): 6 months

Approval duration (renewal): 12 months

Dosing Recommendations

Cryopyrin-Associated Periodic Syndromes (CAPS)

The recommended dose is 150 mg, for patients with body weight greater than 40 kg, administered subcutaneously every 8 weeks.

The recommended dose is 2 mg/kg, for patients with body weight 15 to 40 kg, administered subcutaneously every 8 weeks. For children 15 to 40 kg with an inadequate response, the dose can be increased to 3 mg/kg.

Tumor Necrosis Factor (TNF) receptor Associated Periodic Syndrome (TRAPS), Hyperimmunoglobulin D (Hyper-IgD) Syndrome (HIDS)/Mevalonate Kinase Deficiency (MKD), Familial Mediterranean Fever (FMF)

For body weight less than or equal to 40 kg: The recommended dose is 2 mg/kg administered subcutaneously every 4 weeks. The dose can be increased to 4 mg/kg every 4 weeks if the clinical response is not adequate.

For body weight greater than 40 kg: The recommended dose is 150 mg administered subcutaneously every 4 weeks. The dose can be increased to 300 mg every 4 weeks if the clinical response is not adequate.

Systemic Juvenile Idiopathic Arthritis, Still's disease

The recommended dose with a body weight greater than or equal to 7.5 kg is 4 mg/kg (with a maximum of 300 mg) administered subcutaneously every 4 weeks.

References

1. Ilaris® subcutaneous injection [prescribing information]. East Hanover, NJ: Novartis; September 2020.
2. Shinkai K, McCalmont TH, Leslie KS. Cryopyrin-associated periodic syndromes and autoinflammation. *Clin Exp Dermatol.* 2008;33:1-9.
3. Ozen S, Hoffman HM, Frenkel J, et al. Familial Mediterranean Fever (FMF) and beyond: a new horizon. Fourth International Congress on the Systemic Autoinflammatory Diseases held in Bethesda, USA; 6-10 November 2005. *Ann Rheum Dis.* 2006;65(7):961-964.

4. Genetics Home Reference. US National Library of Medicine. Available at: <https://ghr.nlm.nih.gov/>. Accessed on May 3, 2021. Search terms: TRAPS, familial Mediterranean fever, MKD.
5. ter Haar NM, Oswald M, Jeyaratnam J, et al. Recommendations for the management of autoinflammatory diseases. *Ann Rheum Dis*. 2015;74(9):1636-1644.
6. Ozen S, Demirkaya E, Erer B, et al. EULAR recommendations for the management of familial Mediterranean fever. *Ann Rheum Dis*. 2016;75(4):644-651.
7. Kimura Y, Morgan DeWitt E, Beukelman T, et al. Adding Canakinumab to the Childhood Arthritis and Rheumatology Research Alliance Consensus Treatment Plans for Systemic Juvenile Idiopathic Arthritis: comment on the article by DeWitt et al. *Arthritis Care Res (Hoboken)*. 2014;66(9):1430-1431.
8. DeWitt EM, Kimura Y, Beukelman T, et al. Consensus treatment plans for new-onset systemic juvenile idiopathic arthritis. *Arthritis Care Res (Hoboken)*. 2012;64(7):1001-1010.
9. Ringold S, Weiss PF, Beukelman T, et al. 2013 update of the 2011 American College of Rheumatology recommendations for the treatment of juvenile idiopathic arthritis: recommendations for the medical therapy of children with systemic juvenile idiopathic arthritis and tuberculosis screening among children receiving biologic medications. *Arthritis Rheum*. 2013;65(10):2499-2512.
10. Alten R, Gomez-Reino J, Durez P, et al. Efficacy and safety of the human anti-IL-1 β monoclonal antibody canakinumab in rheumatoid arthritis: results of a 12-week, Phase II, dose-finding study. *BMC Musculoskelet Disord*. 2011;12:153.
11. Hansmann S, Lainka E, Horneff G, et al. Consensus protocols for the diagnosis and management of the hereditary autoinflammatory syndromes CAPS, TRAPS and MKD/HIDS: a German PRO-KIND initiative. *Pediatr Rheumatol Online J*. 2020;18(1):17.