

## Clinical Policy: Canakinumab (Ilaris)

Reference Number: PA.CP.PHAR.246

Effective Date: 01/18

Last Review Date: 04/18

[Coding Implications](#)

[Revision Log](#)

### Description

The intent of the criteria is to ensure that patients follow selection elements established Pennsylvania Health and Wellness<sup>®</sup> clinical policy for Canakinumab (Ilaris<sup>®</sup>).

### FDA Approved Indication(s)

Ilaris is indicated for the treatment of:

- Periodic fever syndromes:
  - Cryopyrin-Associated Periodic Syndromes (CAPS) in adults and children 4 years of age and older including:
    - Familial Cold Autoinflammatory Syndrome (FCAS)
    - Muckle-Wells Syndrome (MWS)
  - Tumor Necrosis Factor Receptor Associated Periodic Syndrome (TRAPS) in adult and pediatric patients
  - Hyperimmunoglobulin D Syndrome (HIDS)/Mevalonate Kinase Deficiency (MKD) in adult and pediatric patients
  - Familial Mediterranean Fever (FMF) in adult and pediatric patients
- Active Systemic Juvenile Idiopathic Arthritis (SJIA) in patients aged 2 years and older

### Policy/Criteria

It is the policy of Pennsylvania Health and Wellness<sup>®</sup> that Ilaris is **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

##### A. Periodic Fever Syndromes (must meet all):

1. Diagnosis of FCAS, MWS, TRAPS, HIDS/MKD, or FMF;
2. Prescribed by or in consultation with a rheumatologist;
3. Member meets one of the following (a or b):
  - a. FCAS or MWS: age  $\geq$  4 years;
  - b. TRAPS, HIDS/MKD, or FMF: age  $\geq$  2 years;
4. For FMF, member meets one of the following (a or b):
  - a. Age  $<$  4 years;
  - b. Failure of a  $\geq$  6 month trial of colchicine at up to maximally indicated doses, unless contraindicated or clinically significant adverse effects are experienced;
5. Dose does not exceed one of the following (a or b):
  - a. FCAS or MWS: 150 mg every 8 weeks;
  - b. TRAPS, HIDS/MKD, or FMF: 300 mg every 4 weeks.

**Approval duration:** 3 months for FCAS or MWS; 6 months for all other indications

**B. Systemic Juvenile Idiopathic Arthritis** (must meet all):

1. Prescribed by or in consultation with a dermatologist, rheumatologist; or gastrointestinal (GI) specialist;
2. Diagnosis of systemic juvenile idiopathic arthritis (SJIA);
3. Age  $\geq$  to 2 years;
4. Member meets one of the following (a or b):
  - a. Failure of a  $\geq$  3 consecutive month trial of methotrexate (MTX) or leflunomide at up to maximally indicated doses unless contraindicated or clinically significant adverse effects are experienced;
  - b. Failure of a  $\geq$  2 week trial of a systemic corticosteroid at up to maximally indicated doses unless contraindicated or clinically significant adverse effects are experienced;
5. Prescribed dose of Ilaris does not exceed 300 mg every 4 weeks;

**C. Other diagnoses/indications:** Refer to PA.CP.PHAR.57 - Global Biopharm Policy.

**II. Continued Approval**

**A. All Indications** (must meet all):

1. Currently receiving medication via PA Health and Wellness benefit or member has previously met all initial approval criteria or Continuity of Care policy applies;
2. Member is responding positively to therapy;
3. If request is for a dose increase, new dose does not exceed one of the following (a or b):
  - a. FCAS or MWS: 150 mg every 8 weeks;
  - b. TRAPS, HIDS/MKD, FMF, or SJIA: 300 mg every 4 weeks.

**Approval duration: 12 months**

**B. Other diagnoses/indications** (must meet 1 or 2):

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or the Continuity of Care policy (PA.LTSS.PHAR.01) applies and documentation supports positive response to therapy; or
2. Refer to PA.CP.PHAR.57 - Global Biopharm Policy.

**Background**

*Description/Mechanism of Action:*

Canakinumab is a human monoclonal anti-human IL-1 $\beta$  antibody of the IgG1/ $\kappa$  isotype. Ilaris binds to human IL- 1 $\beta$  and neutralizes its activity by blocking its interaction with IL-1 receptors, but it does not bind IL-1 $\alpha$  or IL-1 receptor antagonist (IL-1ra).

Cryopyrin-associated periodic syndromes (CAPS) refer to rare genetic syndromes generally caused by mutations in the NLRP-3 [nucleotide-binding domain, leucine rich family (NLR), pyrin domain containing 3] gene (also known as Cold-Induced Auto-inflammatory Syndrome-1 [CIAS1]). CAPS disorders are inherited in an autosomal dominant pattern with male and female offspring equally affected. Features common to all disorders include fever, urticaria-like rash,

arthralgia, myalgia, fatigue, and conjunctivitis. The NLRP-3 gene encodes the protein cryopyrin, an important component of the inflammasome. Cryopyrin regulates the protease caspase-1 and controls the activation of interleukin-1 beta (IL-1 $\beta$ ). Mutations in NLRP-3 result in an overactive inflammasome resulting in excessive release of activated IL-1 $\beta$  that drives inflammation. SJIA is a severe autoinflammatory disease, driven by innate immunity by means of pro-inflammatory cytokines such as interleukin 1 $\beta$  (IL-1 $\beta$ ).

*Formulations:*

Ilaris is supplied in a sterile, single-use, colorless, 6 mL glass vial containing 150 of canakinumab as a white, preservative-free, lyophilized powder. Reconstitution with 1 mL of preservative-free sterile water for injection is required prior to administration.

**Appendices**

**Appendix A: Abbreviation Key**

CAPS: cryopyrin-associated periodic syndromes	MKD: mevalonate kinase deficiency
CHAQ: Childhood Health Assessment Questionnaire	MWS: Muckle-Wells syndrome
CRP: C-reactive protein	NSAID: non-steroidal anti-inflammatory drug
FCAS: familial cold autoinflammatory syndrome	SAA: serum amyloid A
FMF: familial Mediterranean fever	SJIA: active systemic juvenile idiopathic arthritis
HIDS: hyperimmunoglobulin D syndrome	TB: tuberculosis
	TRAPS: tumor necrosis factor receptor associated periodic syndrome

**Coding Implications**

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J0638	Injection, canakinumab, 1 mg

Reviews, Revisions, and Approvals	Date	Approval Date
2Q 2018 annual review: condensed all periodic fever syndromes into one criteria set; duration of initial approval for periodic fever syndromes modified to 6 months; added dermatologist and gastrointestinal specialist requirement to SJIA; removed requirement for TB testing from all criteria; references reviewed and updated.	2.27.18	

**References**

1. Ilaris Prescribing Information. East Hanover, NJ; Novartis Pharmaceuticals Corporation; September 2016. Available at [www.ilaris.com](http://www.ilaris.com). Accessed February 27, 2018.
2. Ringold S, Weiss PF, et al. 2013 update of the 2011 American College of Rheumatology recommendations for the treatment of juvenile idiopathic arthritis. *Arthritis Care Res.* 2013; 65(10): 2499-2512.
3. Beukelman T, et al. 2011 American College of Rheumatology recommendations for the treatment of juvenile idiopathic arthritis: initiation and safety monitoring of therapeutic agents for the treatment of arthritis and systemic features. *Arthritis Care & Research*, 2011; 63(4): 465-482.
4. Kimura Y. Systemic juvenile idiopathic arthritis: Treatment. In: UpToDate, Waltham, MA: Walters Kluwer Health; 2016. Available at: [www.UpToDate.com](http://www.UpToDate.com). Accessed February 27, 2018..
5. 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.