### PRESCRIBING INFORMATION FOR GREAT BRITAIN

# <u>ILARIS® (canakinumab) Prescribing Information.</u> Please refer to the Summary of Product Characteristics (SmPC) before prescribing.

Presentation: 150mg of canakinumab solution for injection in glass vial. Indications: <u>Periodic fever syndromes</u>: Treatment of adults, adolescents and children ≥ 2 years of age with the following: <u>Cryopyrin-associated periodic</u> <u>syndromes</u> (CAPS): including Muckle-Wells syndrome, Neonatal-onset multisystem inflammatory disease/chronic infantile neurological cutaneous articular syndrome and severe forms of familial cold autoinflammatory syndrome/ familial cold urticaria presenting with signs and symptoms beyond cold-induced urticarial skin rash. <u>Tumour necrosis factor receptor associated periodic syndrome</u> (TRAPS), Hyperimmunoglobulin D syndrome (HIDS)/mevalonate kinase deficiency (MKD) and Familial Mediterranean fever (FMF) – in FMF, canakinumab should be given in combination with colchicine. if appropriate.

<u>Still's disease</u>: Treatment of active Still's disease including adult-onset Still's disease and systemic juvenile idiopathic arthritis in patients  $\ge 2$  years of age who have responded inadequately to previous therapy with non-steroidal anti-inflammatory drugs (NSAIDs) and systemic corticosteroids. Canakinumab can be given as monotherapy or in combination with methotrexate.

<u>Gouty arthritis:</u> Symptomatic treatment of adults with frequent gouty arthritis attacks ( $\geq$  3 attacks in previous year) if NSAIDs and colchicine are contraindicated, not tolerated, or provide an inadequate response, and repeated courses of corticosteroids are not appropriate.

**Dosage and administration:** <u>CAPS: Adults, adolescents and children  $\ge$  4 years of</u> <u>age:</u> 150 mg > 40 kg; 2 mg/kg  $\geq$  15 kg and  $\leq$  40 kg; 4 mg/kg  $\geq$  7.5 kg and < 15 kg. <u>Children</u> <u>2 to < 4 years of age</u>:  $4 \text{ mg/kg} \ge 7.5 \text{ kg}$ . Administered every 8 weeks as a single dose via subcutaneous injection. For patients with a starting dose of 150 mg or 2 mg/kg, if a satisfactory clinical response is not achieved after 7 days, consider a second dose of 150 mg or 2 mg/kg. If a full treatment response is subsequently achieved. maintain the intensified dosing regimen of 300 mg or 4 mg/kg every 8 weeks. If a satisfactory clinical response is not achieved 7 days after this increased dose, consider a third dose of 300 mg or 4 mg/kg. If a full treatment response is subsequently achieved, consider maintaining the intensified dosing regimen of 600 mg or 8 mg/kg every 8 weeks. For patients with a starting dose of 4 mg/kg, if a satisfactory clinical response is not achieved after 7 days, consider a second dose of 4 mg/kg. If a full treatment response is subsequently achieved, consider maintaining the intensified dosing regimen of 8 mg/kg every 8 weeks. TRAPS, HIDS/ MKD and FMF:Adults, adolescents and children ≥ 2 years of age:150 mg > 40 kg;  $2 \text{ mg/kg} \ge 7.5 \text{ kg}$  and  $\le 40 \text{ kg}$ . Administered every 4 weeks as a single dose via subcutaneous injection. If a satisfactory clinical response is not achieved after 7 days, consider a second dose of 150 mg or 2 mg/kg. If a full treatment response is subsequently achieved, maintain the intensified dosing regimen of 300 mg (or 4 mg/kg for patients weighing  $\leq$  40 kg) every 4 weeks. Reconsider continued treatment in the absence of clinical improvement. Still's disease: 4 mg/kg (up to a maximum of 300 mg)  $\ge$  7.5 kg. Administered every four weeks via subcutaneous injection. Reconsider continued treatment in the absence of clinical improvement. *Gouty* arthritis: Hyperuricaemia should be managed with urate lowering therapy. Use canakinumab as an on-demand therapy to treat gouty arthritis attacks. 150mg administered subcutaneously as a single dose during an attack. For maximum effect, canakinumab should be administered as soon as possible after the onset of a gouty arthritis attack. Do not re-treat patients who do not respond to initial treatment. In responders requiring retreatment, wait at least 12 weeks before readministering. *Paediatric Population:* Not recommended in children < 2 years of age. Elderly: No dose adjustment is required. Hepatic impairment: Has not been studied in patients with hepatic impairment. Renal impairment: No dose adjustment is needed. However, clinical experience in such patients is limited.

**Contraindications:** Hypersensitivity to the active substance or excipients. Active, severe infections.

Special Warnings & Precautions: Infections: Canakinumab is associated with an increased incidence of serious infections. Monitor for signs and symptoms of infections during and after treatment. Caution when administering to patients with infections, a history of recurring infections, or underlying conditions which may predispose them to infections. Treatment of CAPS, TRAPS, HIDS/MKD, FMF and Still's disease : Treatment should not be initiated or continued in patients with an active infection requiring medical intervention. Treatment of gouty arthritis: Do not administer canakinumab during an active infection. Concomitant use with TNF inhibitors is not recommended because this may increase the risk of serious infections. Isolated cases of unusual or opportunistic infections (including aspergillosis, atypical mycobacterial infections, herpes zoster) have been reported. *Tuberculosis screening:* In approximately 12% of CAPS patients tested with a PPD (purified protein derivative) skin test in clinical trials, followup testing vielded a positive test result while treated with canakinumab without clinical evidence of a latent or active tuberculosis infection. It is unknown whether the use of interleukin-1 (II-1) inhibitors such as canakinumab increases the risk of reactivation of tuberculosis. Before initiation of therapy, all patients must be evaluated for both active and latent tuberculosis infection. Particularly in adult patients, this evaluation should include a detailed medical history. Appropriate screening tests (e.g. tuberculin skin test, interferon gamma release assay or chest X-ray) should be performed in all patients (local recommendations may apply).

Patients must be monitored closely for signs and symptoms of tuberculosis during and after treatment with canakinumab. All patients should be instructed to seek medical advice if signs or symptoms suggestive of tuberculosis (e.g. persistent cough, weight loss, subfebrile temperature) appear during canakinumab therapy. In the event of conversion from a negative to a positive PPD test, especially in highrisk patients, alternative means of screening for a tuberculosis infection should be considered. Neutropenia and Leukopenia: Have been observed. Do not initiate in patients with neutropenia and leukopenia. Assess White blood cell (WBC) counts, including neutrophils, prior to initiation, after 1-2 months. For chronic/ repeated therapies, assess periodically during treatment. If a patient becomes neutropenic or leukopenic, monitor the WBC counts and consider treatment discontinuation. Malianancies: Have been reported. Risk of malianancies is unknown. Hypersensitivity reactions: Have been reported. The majority were mild nowever the risk of severe hypersensitivity reactions cannot be excluded. Hepatic function: Transient and asymptomatic cases of elevations of serum transaminases or bilirubin have been reported. Vaccinations: Live vaccines should not be given concurrently unless benefits clearly outweigh risks. Patients should receive all appropriate vaccinations, including pneumococcal and inactivated influenza. before initiating therapy. Mutation in NLRP3 gene: Clinical experience in CAPS patients without a confirmed mutation in the NLRP3 gene is limited. Macrophage activation syndrome (MAS) in Still's disease patients: Does not appear to increase the incidence of MAS in Still's disease patients, but no definitive conclusion can be made. If MAS occurs, or is suspected, evaluate and treat as early as possible. Symptoms of infection or worsening of Still's disease are known triggers for MAS. Drug reaction with eosinophilia and systemic symptoms (DRESS): Has rarely been reported, predominantly in patients with systemic juvenile idiopathic arthritis (sJIA). If signs and symptoms of DRESS are present and an alternative aetiology cannot be established. Ilaris should not be readministered and a different treatment considered.

Interactions: Use with TNF inhibitors is not recommended as this may increase risk of serious infections. CYP450 expression may be reversed when canakinumab is introduced; adjust dose of any concomitant CYP450 substrates with a narrow therapeutic index as necessary. Live vaccines should not be given concurrently with canakinumab unless the benefits clearly outweigh the risks.

**Fertility, pregnancy & lactation:** Formal studies of the potential effect of canakinumab on human fertility have not been conducted. <u>Women of childbearing potential:</u> Use effective contraception during and for up to 3 months after treatment. <u>Pregnancy:</u> Only use in women who are pregnant or wish to become pregnant after a thorough benefit-risk evaluation.

Newborn infants exposed to canakinumab in utero should not receive live vaccines for 16 weeks following the mother's last dose of canakinumab before childbirth. Instruct women who received canakinumab during pregnancy to inform the baby's healthcare professional. <u>Breast feeding:</u> It is not known if canakinumab is excreted in human milk. The decision whether to breastfeed during canakinumab therapy should only be taken after a thorough risk-benefit assessment.

**Driving & Use of Machinery:** If treatment causes dizziness/vertigo or asthenia, wait for symptoms to resolve completely before driving or operating machines.

**Undesirable effects:** Serious infections have been observed. The most frequent adverse drug reactions were infections predominantly of the upper respiratory tract. Hypersensitivity and opportunistic infections have been reported. Adverse reaction frequencies may vary by indication. Please consult the Summary of Product Characteristics (SmPC) for a detailed listing of <u>all</u> adverse reactions before prescribing. *Very Common* ( $\geq 1/10$ ): Respiratory tract infections (including pneumonia, bronchitis, influenza, viral infection, sinusitis, rhinitis, pharyngitis, tonsillitis, nasopharyngitis, upper respiratory tract infection), ear infection, cellulitis, gastroenteritis, urinary tract infection, upper abdominal pain, injection site reaction, arthralgia, creatinine renal clearance decreased, proteinuria, leukopenia. *Common* ( $\geq 1/100$  to <1/10). Vulvovaginal candidiasis, *Uncommon* ( $\geq 1/1,000$  to <1/100): Gastro-oesophageal reflux disease, platelet count decreased.

#### Legal Category: POM Date of PI Preparation: July 2023 | 296760

Pack & NHS Price (excl. VAT): Ilaris one vial/pack £9927.80; Marketing Authorisation (MA) number: PLGB 00101/1093

ILARIS <sup>®</sup> is a registered Trade Mark. Full prescribing information is available on request from Novartis Pharmaceuticals UK Ltd, 2nd Floor, The WestWorks Building, White City Place, 195 Wood Lane, London, W12 7FQ. Telephone (01276) 698370

Adverse Event Reporting Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Novartis via uk.patientsafety@novartis.com or online through the pharmacovigilance intake (PVI) tool at www.novartis.com/report If you have a question about the product, please contact Medical

Information on 01276 698370 or by email at medinfo.uk@novartis.com

### PRESCRIBING INFORMATION FOR NORTHERN IRELAND

# <u>ILARIS®</u> (canakinumab) Prescribing Information. Please refer to the Summary of Product Characteristics (SmPC) before prescribing.

Presentation: 150mg of canakinumab solution for injection in glass vial.

Indications: <u>Periodic fever syndromes</u>: Treatment of adults, adolescents and children ≥ 2 years of age with the following: <u>Cryopyrin-associated periodic syndromes (CAPS)</u>: including Muckle-Wells syndrome, Neonatal-onset multisystem inflammatory disease/chronic infantile neurological cutaneous articular syndrome and severe forms of familial cold autoinflammatory syndrome/ familial cold urticaria presenting with signs and symptoms beyond cold-induced urticarial skin rash. <u>Tumour necrosis factor receptor associated periodic syndrome (TRAPS)</u>, <u>Hyperimmunoglobulin D syndrome (HIDS)/mevalonate kinase deficiency (MKD) and Familial Mediterranean fever (FME)</u> – in FMF, canakinumab should be given in combination with colchicine, if appropriate.

<u>Still's disease</u>: Treatment of active Still's disease including adult-onset Still's disease and systemic juvenile idiopathic arthritis in patients  $\ge 2$  years of age who have responded inadequately to previous therapy with non-steroidal anti-inflammatory drugs (NSAIDs) and systemic corticosteroids. Canakinumab can be given as monotherapy or in combination with methotrexate.

<u>Gouty arthritis:</u> Symptomatic treatment of adults with frequent gouty arthritis attacks ( $\geq$  3 attacks in previous year) if NSAIDs and colchicine are contraindicated, not tolerated, or provide an inadequate response, and repeated courses of corticosteroids are not appropriate.

Dosage and administration: Please refer to the SmPC for full information on dosing and administration. CAPS: Adults, adolescents and children  $\geq 4$  years of age: 150 mg > 40 kg: 2 mg/kg  $\ge 15 \text{ kg}$  and  $\le 40 \text{ kg}$ : 4 mg/kg  $\ge 7.5 \text{ kg}$  and < 15 kg. Children 2 to < 4 years of age: 4 mg/kg  $\geq$  7.5 kg. Administered every 8 weeks as a single dose via subcutaneous injection. For patients with a starting dose of 150 mg or 2 mg/kg, if a satisfactory clinical response is not achieved after 7 days, consider a second dose of 150 mg or 2 mg/kg. If a full treatment response is subsequently achieved, maintain the intensified dosing regimen of 300 mg or 4 mg/kg every 8 weeks. If a satisfactory clinical response is not achieved 7 days after this increased dose. consider a third dose of 300 mg or 4 mg/kg. If a full treatment response is subsequently achieved, consider maintaining the intensified dosing regimen of 600 mg or 8 mg/kg every 8 weeks. For patients with a starting dose of 4 mg/kg, if a satisfactory clinical response is not achieved after 7 days, consider a second dose of 4 mg/kg. If a full treatment response is subsequently achieved, consider maintaining the intensified dosing regimen of 8 mg/kg every 8 weeks. TRAPS, HIDS/ MKD and FMF:Adults, adolescents and children ≥ 2 years of age:150 mg > 40 kg;  $2 \text{ ma/kg} \ge 7.5 \text{ kg}$  and  $\le 40 \text{ kg}$ . Administered every 4 weeks as a single dose via subcutaneous injection. If a satisfactory clinical response is not achieved after 7 days, consider a second dose of 150 mg or 2 mg/kg. If a full treatment response is subsequently achieved, maintain the intensified dosing regimen of 300 mg (or 4 mg/kg for patients weighing  $\leq$  40 kg) every 4 weeks. Reconsider continued treatment in the absence of clinical improvement. Still's disease: 4 mg/kg (up to a maximum of 300 mg)  $\ge$  7.5 kg. Administered every four weeks via subcutaneous injection. Reconsider continued treatment in the absence of clinical improvement. Gouty arthritis: Hyperuricaemia should be managed with urate lowering therapy. Use canakinumab as an on-demand therapy to treat gouty arthritis attacks. 150mg administered subcutaneously as a single dose during an attack. For maximum effect, canakinumab should be administered as soon as possible after the onset of a gouty arthritis attack. Do not re-treat patients who do not respond to initial treatment. In responders requiring retreatment, wait at least 12 weeks before re-administering. *Paediatric Population:* Not recommended in children < 2 years of age. *Elderly*: No dose adjustment is required. *Hepatic impairment*: Has not been studied in patients with hepatic impairment. Renal impairment: No dose adjustment is needed. However, clinical experience in such patients is limited. **Contraindications:** Hypersensitivity to the active substance or excipients. Active, severe infections.

Special Warnings & Precautions: Infections: Canakinumab is associated with an increased incidence of serious infections. Monitor for signs and symptoms of infections during and after treatment. Caution when administering to patients with infections, a history of recurring infections, or underlying conditions which may predispose them to infections. Treatment of CAPS, TRAPS, HIDS/MKD, FMF and Still's disease : Treatment should not be initiated or continued in patients with an active infection requiring medical intervention. Treatment of gouty arthritis: Do not administer canakinumab during an active infection. Concomitant use with TNF inhibitors is not recommended because this may increase the risk of serious infections. Isolated cases of unusual or opportunistic infections (including aspergillosis, atypical mycobacterial infections, herpes zoster) have been reported. *Tuberculosis screening:* In approximately 12% of CAPS patients tested with a PPD (purified protein derivative) skin test in clinical trials, followup testing vielded a positive test result while treated with canakinumab without clinical evidence of a latent or active tuberculosis infection. It is unknown whether the use of interleukin-1 (II -1) inhibitors such as canakinumah increases the risk of reactivation of tuberculosis. Before initiation of therapy, all patients must be evaluated for both active and latent tuberculosis infection. Particularly in adult patients, this evaluation should include a detailed medical history. Appropriate screening tests (e.g. tuberculin skin test, interferon gamma release assay or chest X-ray) should be performed in all patients (local recommendations may apply). Patients must be monitored closely for signs and symptoms of tuberculosis during

and after treatment with canakinumab. All patients should be instructed to seek medical advice if signs or symptoms suggestive of tuberculosis (e.g. persistent cough, weight loss, subfebrile temperature) appear during canakinumab therapy. In the event of conversion from a negative to a positive PPD test, especially in highrisk patients, alternative means of screening for a tuberculosis infection should be considered. Neutropenia and Leukopenia: Have been observed. Do not initiate in natients with neutronenia and leukopenia Assess White blood cell (WBC) counts, including neutrophils, prior to initiation, after 1-2 months. For chronic/ repeated therapies, assess periodically during treatment. If a patient becomes neutropenic or leukopenic, monitor the WBC counts and consider treatment discontinuation. Malignancies: Have been reported. Risk of malignancies is unknown. Hypersensitivity reactions: Have been reported. The majority were mild however the risk of severe hypersensitivity reactions cannot be excluded. Hepatic function: Transient and asymptomatic cases of elevations of serum transaminases or bilirubin have been reported. Vaccinations: Live vaccines should not be given concurrently unless benefits clearly outweigh risks. Patients should receive all appropriate vaccinations, including pneumococcal and inactivated influenza, before initiating therapy. Mutation in NLRP3 gene: Clinical experience in CAPS patients without a confirmed mutation in the NLRP3 gene is limited. Macrophage activation syndrome (MAS) in Still's disease patients: Does not appear to increase the incidence of MAS in Still's disease patients, but no definitive conclusion can be made. If MAS occurs, or is suspected, evaluate and treat as early as possible. Symptoms of infection or worsening of Still's disease are known triggers for MAS. Based on clinical trial experience, canakinumab does not appear to increase the incidence of MAS in Still's disease patients, but no definitive conclusion can be made. Drug reaction with eosinophilia and systemic symptoms (DRESS): Has rarely been reported, predominantly in patients with systemic juvenile idiopathic arthritis (s.IIA). If signs and symptoms of DRESS are present and an alternative aetiology cannot be established, llaris should not be readministered and a different treatment considered.

**Interactions:** Use with TNF inhibitors is not recommended as this may increase risk of serious infections. CYP450 expression may be reversed when canakinumab is introduced; adjust dose of any concomitant CYP450 substrates with a narrow therapeutic index as necessary. Live vaccines should not be given concurrently with canakinumab unless the benefits clearly outweigh the risks.

**Fertility, pregnancy & lactation:** Formal studies of the potential effect of canakinumab on human fertility have not been conducted. <u>Women of childbearing potential:</u> Use effective contraception during and for up to 3 months after treatment. <u>Pregnancy:</u> Only use in women who are pregnant or wish to become pregnant after a thorough benefit-risk evaluation.

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### Legal Category: POM

### Date of PI Preparation: July 2023 | 296761

Pack & NHS Price (excl. VAT): Ilaris one vial/pack £9927.80; Marketing Authorisation (MA) number: EU/1/09/564/004

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If you have a question about the product, please contact Medical Information on 01276 698370 or by email at medinfo.uk@novartis.com