



# AWTTC

All Wales Therapeutics & Toxicology Centre  
Canolfan Therapiwteg a Thocsicoleg Cymru Gyfan

## **Adalimumab for the treatment of paediatric patients with severe refractory non-infectious intermediate, posterior and pan- uveitis (OW04)**

**September 2021**

### **ONE WALES INTERIM COMMISSIONING DECISION**

#### **Adalimumab for the treatment of paediatric patients with severe refractory non-infectious intermediate, posterior and pan- uveitis**

**Date of original advice: August 2016**

**Date of review: July 2021**

Using the agreed starting and stopping criteria adalimumab can continue to be made available within NHS Wales to treat paediatric patients (aged  $\geq 2$  to  $\leq 18$  years) with severe refractory non-infectious intermediate, posterior and pan- uveitis.

Adalimumab should be initiated in specialist centres for this indication.

Adalimumab is not licensed to treat this indication and is therefore 'off-label'. Each provider organisation must ensure all internal governance arrangements are completed before this medicine is prescribed.

The risks and benefits of the off-label use of adalimumab for this indication should be clearly stated and discussed with the patient to allow informed consent.

Providers should consult the relevant guidelines on prescribing unlicensed medicines before any off-label medicines are prescribed.

This advice will be reviewed after 2 years or earlier if new evidence becomes available.

#### **Clinician responsibility**

Clinicians will be obliged to collect and monitor patient outcomes. Evidence of clinical outcomes will be taken into consideration when reviewing the One Wales Medicines Assessment decision.

#### **Health board responsibility**

Health boards will take responsibility for implementing One Wales Medicines Assessment Group decisions and ensuring that a process is in place for monitoring clinical outcomes.

**One Wales advice promotes consistency of access across NHS Wales and will be disseminated to the service following agreement of Health Board Chief Executives.**

## **Starting and stopping criteria for adalimumab for the treatment of paediatric patients with severe refractory non-infectious intermediate, posterior and pan-uveitis**

These criteria are taken from the NHS England Clinical Commissioning policy document<sup>1</sup> with further adaptation from clinical experts, University Hospitals Bristol NHS Foundation and Translation Health Science (Ophthalmology), Bristol Medical School, Faculty of Health Sciences.

### **Start Criteria**

Children eligible for the use of adalimumab for the treatment of uveitis would meet the following criteria:

1. The presence of active anterior uveitis, and/or vitritis and/or clinically active chorioretinal lesions and/or macular oedema, defined as a sustained grade of  $\geq +1$  cellular infiltrate in the anterior chamber, BIO score of  $\geq 1$  and OCT evidence of macular oedema  
AND
2. Failure to control uveitis to  $+0.5$  cells or BIO score or persistent macular oedema or less with:
  - Methotrexate (minimum dose of  $10 \text{ mg/m}^2$  with a maximum dose of  $25 \text{ mg/m}^2$ ) or mycophenolate mofetil, usually in combination with
  - $0.1 \text{ mg/kg/day}$  of oral prednisolone  
and
  - 2 drops of topical steroid eye drops per day.

Treatment effect should be assessed after at least 12 weeks.

When the patient is methotrexate intolerant an adequate trial (3-6 months) of an alternative conventional immunosuppressant should be given.

Exceptionally a child, presenting with very severe sight-threatening disease, will be considered for adalimumab before the end of a 12-week trial of prednisolone and methotrexate or mycophenolate mofetil.

Very severe sight-threatening features at presentation include:

- Severe inflammatory activity ( $\geq 3+$  cells)
- Cataract
- Glaucoma (Intraocular pressure  $>21 \text{ mmHg}$  with evidence of optic neuropathy)
- Hypotony (Intraocular pressure  $\leq 5 \text{ mmHg}$ )
- Dense vitreous opacity – BIO score of  $>+ 2$
- Macular oedema causing visual impairment  $\leq 6/18$  or  $\geq$  to CMT of  $350 \mu\text{m}$

As this is an unlicensed treatment clinicians must follow their employers' requirements regarding patient/carer consent for treatment.

Adalimumab should always be initiated in a specialised ophthalmology centre.

The dose of adalimumab administered in clinical trials was  $20 \text{ mg}$  for patients weighing  $< 30 \text{ kg}$  and  $40 \text{ mg}$  in patients weighing  $\geq 30 \text{ kg}$  every 2 weeks.

Dose frequency may be escalated to  $40 \text{ mg}$  once every week if safe to do so in patients with partial response and sight-threatening disease within three months of treatment. If no response is achieved in three months then treatment is considered a failure and treatment should be stopped.

### **In Treatment**

Response to therapy should be assessed after 3 months of therapy and re-assessed every 3 months whilst treatment continues. The following data points must be collected by for each patient every 3 months:

- Standardisation of the Uveitis Nomenclature (SUN) cell activity score
- Total oral corticosteroid use
- Frequency of topical steroid eye drops
- Visual acuity measured by age-appropriate Logarithm of Minimum Angle of Resolution (LogMAR) assessment
- Presence of optic neuropathy
- Presence of cataract
- Presence of hypotony
- Presence of macular oedema

Children who respond to treatment with adalimumab (as defined by reduction of inflammation to 0.5+ cellular activity or less or BIO score of 0.,5 or less or resolution of macular odema) will continue treatment for 18 months at which time a trial of treatment withdrawal will be undertaken. If relapse occurs, restarting adalimumab will be considered using the same start criteria in the policy.

Serious adverse events must be reported to the MHRA using the yellow card system.

### **Stop Criteria**

Adalimumab for the treatment of uveitis is stopped using the following criteria:

1. 2-step increase from baseline in SUN cell activity score (anterior chamber [AC] cells) or BIO score or maintained macular oedema over 2 consecutive readings at least a month a part
2. Sustained non-improvement with entry grade or greater for 2 consecutive readings
3. Worsening of existing ocular co-morbidity after 3 months if deemed due to persistent inflammation and not a result of progressive structural damage due to previous inflammation
4. Sustained scores as recorded at entry grade measured over 2 consecutive readings (grades 1 to 2) still present after 6 months of therapy
5. Less than 0.5+ of cellular activity or BIO score or resolution of macular oedema at 18 months of treatment

Refer also to the dosing section above under “starting criteria”.

### **Reference**

NHS England. Interim Clinical Commissioning Policy: Adalimumab for children with severe refractory uveitis. Ref. D12X02. 2015. Available at: <https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/11/d12x02-paediatric-uveitis-anti-tnf.pdf> Accessed Jun 2016.

**This is a summary of new evidence available and patient outcome data collected, to inform the 2021 review**

**Background**

Uveitis is a term for inflammation within the eye which, in severe cases, can lead to blindness. Uveitis is classified according to the location of inflammation: anterior, intermediate, posterior and pan-uveitis. Adalimumab was licensed in 2017 for use in children from two years of age for the treatment of chronic, non-infectious anterior uveitis who have had an inadequate response to or are intolerant to conventional therapy, or in whom conventional therapy is inappropriate<sup>1</sup>. Adalimumab is recommended for use in this indication by the All Wales Medicines Strategy Group (AWMSG)<sup>2</sup>. Treatment of non-anterior uveitis (i.e. intermediate, posterior and pan-uveitis) remains off-label and is currently supported by One Wales interim advice<sup>3</sup>. Adalimumab is available in NHS England under the commissioning medicines for children in specialised services policy in line with the National Institute for Health and Care Excellence technology appraisal guidance for adults<sup>4-6</sup>.

**Current One Wales Interim Decision**

Using the agreed starting and stopping criteria adalimumab can continue to be made available within NHS Wales to treat paediatric patients (aged  $\geq 2$  to  $\leq 18$  years) with severe refractory non-infectious intermediate, posterior and pan-uveitis. Reviewed July 2020<sup>3</sup>.

**Licence status**

Adalimumab for the treatment of severe refractory non-infectious intermediate, posterior and pan-uveitis remains an off-label indication.

**Guidelines**

There are no changes to current guidelines.

**Licensed alternative medicines/Health Technology Appraisal advice for alternative medicines**

No alternative medicines have been licensed for non-anterior uveitis in paediatric patients since the last review.

**Efficacy/Effectiveness**

A repeat literature search identified no new efficacy/effectiveness data that investigated adalimumab for the treatment of uveitis in paediatric patients.

**Safety**

No new significant safety issues were identified.

**Cost effectiveness**

There are no new cost-effectiveness data.

**Budget impact**

[CONFIDENTIAL DATA REMOVED]

**Impact on health and social care services**

No new information has been provided.

**Patient outcome data**

[CONFIDENTIAL DATA REMOVED]

**References**

1. European Medicines Agency. Humira®. Procedural steps taken and scientific information after the authorisation. Aug 2019. Available at: [https://www.ema.europa.eu/en/documents/procedural-steps-after/humira-epar-procedural-steps-taken-scientific-information-after-authorisation\\_en.pdf](https://www.ema.europa.eu/en/documents/procedural-steps-after/humira-epar-procedural-steps-taken-scientific-information-after-authorisation_en.pdf). Accessed Jun 2021.
2. All Wales Medicines Strategy Group. Final Appraisal Recommendation - 2717. Adalimumab (Humira®) 40 mg solution for injection. Dec 2017. Available at: <https://awmsg.nhs.wales/medicines-appraisals-and-guidance/medicines-appraisals/adalimumab-humira/>. Accessed Jun 2021.

3. All Wales Therapeutics and Toxicology Centre. One Wales Interim Commissioning Decision: Adalimumab for the treatment of paediatric patients with severe refractory non-infectious intermediate, posterior and pan-uveitis. Jul 2020. Available at: <https://awmsg.nhs.wales/medicines-appraisals-and-guidance/medicines-appraisals/one-wales-adalimumab-for-paediatric-uveitis/>. Accessed Jun 2021.
4. NHS England. Specialised Commissioning Drugs Briefing - Spring 2019. Apr 2019. Available at: <https://www.sps.nhs.uk/articles/nhse-england-specialised-commissioning-drugs-briefing-spring-2019/>. Accessed Jun 2021.
5. National Institute for Health and Care Excellence. Technology Appraisal TA460. Adalimumab and dexamethasone for treating non-infectious uveitis. Jul 2017. Available at: <https://www.nice.org.uk/guidance/ta460>. Accessed Jun 2021.
6. NHS England. Commissioning Medicines for Children in Specialised Services. May 2017. Available at: <https://www.england.nhs.uk/publication/commissioning-medicines-for-children-specialised-services/>. Accessed Jun 2021.