AWMSG Secretariat Assessment Report – Limited submission

Mepolizumab (Nucala®▼) 100 mg powder for solution for injection

Company: GlaxoSmithKline UK

Licensed indication under consideration: Add-on treatment for severe refractory eosinophilic asthma in adolescents and children aged 6 years and older.

▼This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions.

Date of licence extension: 27 August 2018

Comparator(s)

Mepolizumab is the first medicine licensed for use as an add-on therapy for severe refractory eosinophilic asthma in the paediatric population and will not displace any product already in current practice.

Limited submission details

The limited submission criteria were met based on a minor licence extension.

Clinical effectiveness

- Severe eosinophilic asthma is a subtype of asthma that is rare in children. Children are at higher risk of serious and potentially life-threatening adverse events compared to adults and treatment options are currently very limited.
- In 2017, mepolizumab was recommended by the National Institute of Health and Care Excellence (NICE) for restricted use in adults as an add-on treatment for severe refractory eosinophilic asthma (TA431). Mepolizumab is available in NHS Wales for adults under a Department of Health Patient Access Scheme (PAS).
- This submission covers the licence extension for use in children aged 6 to 17 years with severe refractory eosinophilic asthma. The company focusses the submission on a subpopulation of the licensed indication in line with NICE TA431.
- Clinical efficacy in adolescents was demonstrated using partial extrapolation of adult data from two multicentre, randomised, double-blind, placebo-controlled, parallel-group phase III studies of 32 weeks (MEA115588) and 24 weeks (MEA200862) in patients aged 12 years and older. Sub-group analysis of combined data from these two studies showed a 40% reduction in clinically significant exacerbations (rate ratio 0.60; 95% CI: 0.17, 2.10) in patients aged 12 to 17 years (n=34) compared with a 54% reduction in adults (rate ratio 0.46; 95% CI: 0.38, 0.56). Although the confidence interval is wide due to the small adolescent sample size, the point estimates favoured active treatment in both

trials. Additional analyses were supportive that exacerbation reduction in children aged 12 years and older is consistent with that observed in adults.

- The submission includes results from a 12-week multicentre, open-label, uncontrolled, phase II study (MEA200363) to evaluate the pharmacokinetics and pharmacodynamics of mepolizumab in 36 children aged from 6 to 11 years with severe eosinophilic asthma. Asthma control scores were measured as a secondary endpoint and exacerbation rates as an exploratory endpoint to give limited clinical efficacy data for this age group. An overall improvement in asthma control was observed over the study period and the overall exacerbation rate at 12 weeks was lower than that in the placebo groups of the adult/adolescent studies at 12 weeks and at the higher end of the exacerbation rates seen in the mepolizumab treated groups.
- The Committee for Medicinal Products for Human Use concluded that the safety profile of mepolizumab in children aged between 6 and 17 years appeared similar to that observed in adults. No new safety signals were identified from longer-term studies of up to 52 weeks.
- Mepolizumab is administered by subcutaneous injection every four weeks and is intended for long-term treatment.

Budget impact

- In-line with the subpopulation in NICE TA431, the company estimate that in Year 1 there are 189 children aged 6 to 17 years in Wales eligible for treatment with mepolizumab increasing to 269 children in Year 5. This is based on population data for Wales, published prevalence and incidence data for severe asthma in the UK and internal company data. The figure for Year 5 may be an overestimate due to the company's calculation method for prevalence.
- The company estimate that seven children aged between 6 and 17 years will receive mepolizumab treatment in Year 1 based on an anticipated uptake of 3.5% increasing to 16 children in Year 5 based on an estimated uptake of 6%. The company confirm that this estimate has been externally validated by paediatric severe asthma clinicians in England and Northern Ireland.
- The company calculates that the annual treatment cost for a child aged 6 to 17 years based on a Patient Access Scheme (PAS) discount price for mepolizumab is [commercial in confidence figure removed].
- Using the PAS discount price and there being seven eligible patients in Year 1 and 16 in Year 5, the company estimates the budget impact to be [commercial in confidence figure removed] in Year 1 and [commercial in confidence figure removed] in Year 5.
- The estimated budget impact is based on medicine acquisition costs only; it does not consider any associated administration costs or potential savings resulting from reduced exacerbations.

Additional information

- AWTTC is of the opinion that, if recommended, mepolizumab (Nucala®) is appropriate for specialist only prescribing within NHS Wales for the indication under consideration.
- The company does not anticipate that mepolizumab (Nucala®) will be supplied by a home healthcare provider.

Evidence search

Date of evidence search: 18 December 2018
Date of range of evidence search: No date limits were applied to database searches.

Further information

This assessment report will be considered for review every three years.

References are available on request. Please email AWTTC at AWTTC@Wales.nhs.uk for further information.

This report should be cited as: All Wales Therapeutics and Toxicology Centre. AWMSG Secretariat Assessment Report. Mepolizumab (Nucala®) 100 mg powder for solution for injection. Reference number: 3750. March 2019.