AWMSG Secretariat Assessment Report – Limited submission

Adalimumab (Humira®) 40 mg solution for injection (pre-filled pen, pre-filled syringe and vial)

Company: AbbVie Ltd

Licensed indication under consideration:
Treatment of active moderate to severe hidradenitis suppurativa (acne inversa) in adolescents from 12 years of age with an inadequate response to conventional systemic hidradenitis suppurativa (HS) therapy.

Date of licence extension: 12 December 2016

Comparator(s)

- None, no active treatments currently available and/or licensed in Wales for this indication.

Limited submission details

The limited submission criteria were met based on:
- A minor licence extension.

Clinical effectiveness

- Adalimumab (Humira®) is the first anti-TNF therapy licensed for moderate to severe HS in adolescents.
- NICE guidance (TA392) recommends adalimumab as an option for use in adults with moderate to severe HS whose disease has not responded to conventional systemic therapy; this guidance does not include the licence extension for adolescents.
- The Committee for Medicinal Products for Human Use (CHMP) were satisfied that based on the similarity of HS disease in adults and adolescents that extrapolation of data from the adult population was acceptable and that the cross-indication safety profile in paediatric patients at a similar or more frequent dose was relevant. Reflecting CHMP advice the company submission does not include any clinical trials for the use of adalimumab in adolescent patients with HS.
- Efficacy and safety in adolescent patients is based on clinical evidence for treating adult HS patients with adalimumab from two randomised, double-blind, placebo-controlled, phase III trials (PIONEER I and II)
- The majority of adult patients in PIONEER I and II were white Caucasian from the USA or Europe (not UK). All patients had moderate to severe HS, defined as Hurley Stage II or III disease with a total abscess and inflammatory nodule count greater than three. All subjects were intolerant, had a contraindication or an inadequate response to at least a three month trial of systemic antibiotic therapy. Following an initial 12 week double-blind treatment period, PIONEER I and II met their primary efficacy endpoint; people treated with adalimumab were significantly more likely to have a HS clinical response (HiSCR) than those treated with placebo. HiSCR was defined as at least a 50% reduction in the total abscess and inflammatory nodule count, with no increase in abscesses or draining fistulas.

- At week 12, adalimumab was associated with significant improvements in health-related quality of life, measured using the skin-specific Dermatology Life Quality Index; the HS Quality of Life; the EuroQol-5D (PIONEER II only); and the physical component summary score of the SF-36 (PIONEER I only).
- Population modelling based on PIONEER I and II, along with extrapolation of pharmacokinetic data obtained in children and adolescents in other indications (juvenile idiopathic arthritis, enthesitis-related arthritis, paediatric chronic plaque psoriasis and paediatric Crohn's disease) was used to simulate exposure and determine HiSCR response in adolescents with HS. Given the very low prevalence of HS in adolescents, CHMP accepted the use of pharmacokinetic and pharmacodynamic modelling as the best option available to extend the adult HS indication to adolescents.
- CHMP noted that adalimumab is approved for use in children as young as two years in other indications, with maximal dosing regimens similar to that for adolescent HS patients. Incidences of treatment emergent adverse events are similar across paediatric indications and no new safety signals compared to adults have been identified.

Budget impact

- Estimates of the Welsh adolescent population (208,394) anticipated to have HS in Wales were obtained from the Office of National Statistics.
- Market research conducted by the submitting company estimated that only 19% of patients with HS are diagnosed, and of these 82% receive treatment for the condition. The company estimated that only 45% of diagnosed patients will be seen by a dermatologist and 53.2% of these patients will have moderate to severe HS.
- Based on a prevalence figure for HS of 1%, obtained from a survey conducted in 2005 in the French population and the market research outlined above, the company estimated that there are 78 adolescent patients with moderate to severe HS in Wales. Costs provided in this submission are based on the recommended dosing for adolescents with HS (from 12 years of age, weighing at least 30 kg); first dose of 80 mg (two 40 mg injections in one day), followed by 40 mg every other week starting one week later.
- Medicine acquisition costs only are provided in the submission as adalimumab will only be used after an inadequate response to conventional systemic HS therapy. The company anticipate that the proportion of moderate to severe patients eligible for a biologic treatment and expected to receive adalimumab will be [commercial in confidence text removed] in Year 1 rising to [commercial in confidence text removed] Year 5
- Net medicine costs for treating adolescent patients with adalimumab ranges from [commercial in confidence figure removed] in Year 1 to [commercial in confidence figure removed] in Year 5 based on a Wales Patient Access Scheme (WPAS) price. Associated administration costs range from [commercial in confidence figure removed] in Year 1 to [commercial in confidence figure removed] in Year 5.
- No estimation has been made of the number of patients that would require a dose frequency increase to 40 mg every week due to an inadequate response to adalimumab.

Additional information

- AWTTC is of the opinion that, if recommended, adalimumab (Humira®) is appropriate for specialist only prescribing within NHS Wales for the indication under consideration.
- The company anticipate that adalimumab (Humira®) may be supplied by a home healthcare provider.

Evidence search

Date of evidence search: 10 March 2017.
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. Adalimumab (Humira®) 40mg solution for injection (pre-filled pen, pre-filled syringe and vial). Reference number: 3371. June 2017.