Systemic Biological Therapies for Psoriasis

NHS Hull University Teaching Hospitals NHS Trust

If the patient has **moderate to severe disease** - PASI score ≥10, DLQI score >10 AND psoriasis has failed to respond to standard systemic therapies including ciclosporin, methotrexate and PUVA, OR the person has a contraindication to, or is intolerant of, these treatments.

Choose one of:
Apremilast (TA419)
Dimethyl Fumarate (TA475)

FIRST LINE BIOLOGICS
Choose from the biosimilar agents:
Adalimumab (Amgevita) (Anti-TNF) (TA146)
Etanercept (Benepali) (Anti-TNF) (TA146)
If pregnant— Certolizumab (Anti-TNF) (TA574)

If psoriasis has not responded to standard systemic therapies including ciclosporin, methotrexate and PUVA or the person has a contraindication to, or is intolerant of, see flow chart below for treatment options.
If a person has both psoriasis and psoriatic arthritis, take into account both conditions before initiating or making changes to biological therapy and manage their treatment in consultation with a rheumatologist .

SECOND LINE BIOLOGICS
Choose alternative from:
Certolizumab (Anti-TNF) (TA574)
Infliximab (Remsima) (Anti-TNF) (TA134)
Bimekizumab (IL-17A) (TA723)
Brodalumumab (IL-17A) (TA350)
Ixekizumab (IL-17A) (TA422)
Secukinumab (IL-17A) (TA350)
Guselkumab (IL-23) (TA521)
Risankizumab (IL-23) (TA596)
Tildrakizumab (IL-23) (TA575)
Ustekinumab (IL-12/23) (TA180)

Review if there has been an adequate response to therapy at the following time frames:

- 16 weeks (adalimumab, apremilast, certolizumab, dimethyl fumarate, guselkumab, risankizumab, ustekinumab)
- 12 weeks (brodalumab, etanercept, ixekizumab, secukinumab, tildrakizumab)
- 10 weeks (infliximab)

If secondary non-response or tolerance, move to the next step of the pathway. If positive response, maintain treatment and re-assess every 3-6 months.

THIRD LINE
Choose an alternative mechanism of action from the first and second line choices.

FOURTH LINE
Choose an alternative mechanism of action from the first, second and third line choices.

Very severe disease i.e. PASI score ≥20, DLQI score >18 **AND** psoriasis has failed to respond to standard systemic therapies including ciclosporin, methotrexate and PUVA, **OR** patient has a contraindication to, or is intolerant of, these treatments.

Choose from biosimilar agents:
Infliximab (Remsima) (Anti-TNF) (TA134)

If no improvement, stop bDMARD
(requests for further bDMARD are subject to IFR process).

An adequate response is defined as: a 75% decrease in PASI score from when treatment started (PASI 75), **OR** a 50% decrease in PASI score (PASI 50) and a 5 point decrease in DLQI from when treatment started.

Choice of Biologic then dependent upon:-

- Cost effectiveness, dosing schedule as per patient needs and patient device/route preference (Adalimumab or Etanercept biosimilar first line when clinically appropriate)
- Proven efficacy and safety profile in long term use
- Patient co-morbidities
- Ease vs complexity of monitoring
- Ustekinumab dose escalation for patients <100 Kg based on patient's response to treatment, local, regional and national experience and close monitoring of effectiveness and side effects profile

References: Specialist Pharmacy Service. Updated RMOC Advisory Statement: Sequential Use of Biologics. [Internet]. 2020. [Cited March 2022]. Available from https://www.sps.nhs.uk/articles/rmoc-advisory-statement-sequential-use-of-biologic-medicines/

Prepared by: Emily Hardaker Advanced Clinical Pharmacist

Approved by: Dermatology & HERPC April 2022 Review date: April 2025