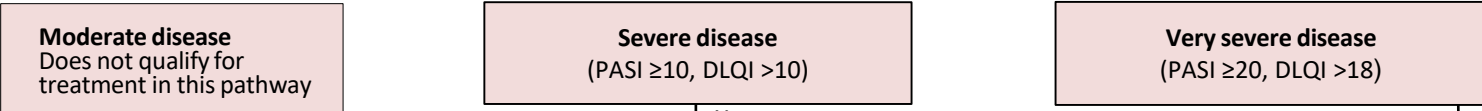


Treatment of Severe Plaque Psoriasis AFTER the use of systemic treatments have failed (in line with NICE TAs and local JPC guidance), September 2019.

This algorithm is only applicable for use in patients who have failed to respond to, who are intolerant of, or who have contraindications to the use all of standard systemic therapies including ciclosporin, methotrexate and phototherapy*. The treatment choices available vary depending on severity of disease (as indicated in the algorithm below).
NB : Severe disease : Initial treatment choices include Dimethyl Fumarate, Apremilast or a biologic agent
Very severe disease : Infliximab is the only available agent suitable for use
 *NICE has confirmed that the TAs should be interpreted as people having tried ALL standard systemic treatment before progressing to the next stage of the pathway.



- Biologic agents** (As per individual NICE TAs).
 The most cost effective agent, suitable for the individual patient, should be chosen. Biosimilars[#] should be considered if available:
- Adalimumab[#], TA146** Review at 16 weeks (TNF inhibitor)
 - Brodalumab, TA511** Review at 12 weeks (IL-17 inhibitor)
 - Certolizumab pegol, TA574** Review at 16 weeks (TNF inhibitor)
 - Etanercept[#], TA103** Review at 12 weeks (TNF inhibitor)
 - Guselkumab, TA521** Review at 16 weeks (IL-23 inhibitor)
 - Ixekizumab, TA442** Review at 12 weeks (IL-17A inhibitor)
 - Risankizumab, TA596** Review at 16 weeks (IL-23 inhibitor)
 - Secukinumab, TA350** Review at 12 weeks (IL-17A inhibitor)
 - Tildrakizumab, TA575** Review at 12- 28 weeks (IL-23 inhibitor)
 - Ustekinumab, TA180** Review at 16 weeks (IL-12 & IL-23 inhibitor)

Dimethyl Fumarate (DMF), TA 475
 Immunomodulator
 Review at 16 weeks

Consider using alternative oral agent if appropriate

Apremilast, TA 419
 PDE-4 inhibitor
 Review at 16 weeks

Assess patient's response - have they achieved an adequate response (see box 1)? Withdraw if adequate response is not maintained and move to next stage in the pathway

Continue with 6-12 monthly monitoring

Infliximab[#], TA 138
 TNF Inhibitor
 Review at 10 weeks

Assess patient's response - have they achieved an adequate response (see box 1)? Withdraw if adequate response is not maintained and move to next stage in the pathway

Continue with 6-12 monthly monitoring

Second line biologic – CG153/local agreement (April 2019).
 Consider changing to an alternative biologic drug if:

- the psoriasis does not respond adequately to the first biologic
- the psoriasis initially responds adequately but subsequently loses this response (secondary failure)
- the first biologic drug cannot be tolerated or becomes contraindicated

Consider **apremilast or dimethyl fumarate** (if not used earlier in the pathway)

Assess patient's response - have they achieved an adequate response (see box 1)? Withdraw if adequate response is not maintained and move to next stage in the pathway

Third line biologic - CG153/local agreement (April 2019).
 Consider changing to an alternative biologic drug if any of the criteria under "second line biologic" apply.
 Treatment should only be initiated following advice from a consultant dermatologist with expertise in biologic therapy.

Box 1- Adequate response Either:

- a 75% reduction in the PASI score (PASI 75) from when treatment started.
- a 50% reduction in the PASI score (PASI 50) and a 5 point reduction in DLQI from start of treatment.

Biosimilars[#]
 Biosimilar versions of biologics are becoming available. The prescribing of all biologics should be by brand name. Biosimilars should be prescribed in accordance with current local arrangements (all new patients started on biologics (when a biosimilar is available) to be prescribed biosimilars, existing patients to be reviewed with a view to switching from originator to biosimilar).