Hertfordshire Medicines Management Committee
Treatment of severe plaque psoriasis in adults AFTER the use of systemic treatments have failed (in line with NICE guidance, technology appraisals and local agreement)

This algorithm is only applicable for use in adult patients who have failed to respond to, who are intolerant of or who have contraindications to the use of standard systemic therapies i.e. ciclosporin, methotrexate and phototherapy. The treatment choices available vary depending on severity of disease (as indicated in the algorithm below).

**Box 1 – First-line biologic agents (as per NICE TAs)**
The least expensive appropriate option should be chosen. Options are listed by cost and class (least to most expensive):

1. **TNF inhibitors**
   a) Adalimumab (biosimilar only), TA146
   b) Etanercept (biosimilar only), TA103
   c) Infliximab (biosimilar only), TA134
   Only if PASI ≥20 and DLQI >18
   Review at 10 weeks
2. **IL-17 inhibitors**
   a) Brodalumab, TA511
   Review at 12 weeks
   b) Ixekizumab, TA442
   Review at 12 weeks
   c) Secukinumab, TA350
   Review at 12 weeks
3. **IL-23 inhibitors**
   a) Guselkumab, TA521
   Review at 16 weeks
   b) Ustekinumab, TA180
   Review at 16 weeks

**Box 2 – Adequate response**
As per NICE, 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.

**Box 3 – Second line biologic agents** (CG153 / local agreement, December 2018)
Consider changing to an alternative biologic drug if the psoriasis does not respond adequately (primary or secondary failure, see box 2) OR the drug cannot be tolerated / becomes contraindicated AND a biologic from a different class can be used.

The least expensive appropriate drug in class should be used. Where there is more than one suitable class, the least expensive option should be chosen. See box 1 for cost order of biologics.

**Assess response – has an adequate response been achieved (see box 2)?**
Withdraw if adequate response is not maintained / intolerant and move to next stage in the pathway

**Third line biologic agents** (Local agreement, December 2018)
Consider changing to an alternative biologic drug as per box 3.
The least expensive appropriate drug in class should be used. Where there is more than one suitable class, the least expensive option should be chosen. See box 1 for cost order of biologics.

**Assess response – has an adequate response been achieved (see box 2)?**
Withdraw if adequate response is not maintained / intolerant and move to next stage in the pathway (if an option) or STOP

TREATMENT REQUESTS BEYOND THE END OF THE ALGORITHM ARE NOT ROUTINELY COMMISSIONED