

1st line DMARDs

Trial of at least 2 DMARDs either alone or in combination. If a standard DMARD taken at maximum tolerated dose for at least 3 months does not provide adequate improvement in disease activity switch to or add another DMARD.

Patient fulfils NICE criteria (≥ 3 tender and ≥ 3 swollen joints) and disease has not responded to adequate trials of at least 2 standard DMARDs, given alone or in combination (6 months total). Choice of high cost drug should be based on clinical factors (see box 1) and best value (see box 2).

2nd line

Either:

Anti-TNF: adalimumab (TA199), certolizumab (TA445), etanercept (TA199), golimumab (TA220) or infliximab (TA199)

Or:

IL17: ixekizumab (TA537) or secukinumab (TA445)

Or:

JAK: tofacitinib (TA543) with methotrexate

Or:

PDE4: apremilast (TA433)

If anti-TNFs contraindicated, either:

JAK: upadacitinib (TA768)

Or:

IL23: guselkumab (TA815)

Or:

IL17: bimekizumab (TA916)

Or:

IL12/23: ustekinumab (TA340)

Assess response (see box 3 for review period). Continue if improvement as per NICE (an improvement in ≥ 2 of the PsARC criteria, 1 of which must be tender or swollen joint count, with no worsening of any of the criteria). If no adequate response switch to alternative.

Subsequent choices:

Either:

Alternative anti-TNF from above list

Or:

IL17: secukinumab, ixekizumab or bimekizumab

Or:

JAK: tofacitinib or upadacitinib

Or:

IL23: guselkumab or risankizumab (TA803). N.B.

Risankizumab only if moderate to severe psoriasis (baseline PASI >10)

Or:

IL12/23: ustekinumab

Or:

PDE4: apremilast

Box 1: Clinical Factors*

Joint disease: consider anti-TNF, IL17 and upadacitinib ahead of IL23, ustekinumab ahead of apremilast

Skin disease: consider monoclonal anti-TNF (adalimumab, certolizumab, infliximab), IL17, IL23, ustekinumab

Axial disease: consider anti-TNF, IL17, upadacitinib

Moderate/severe/recurrent uveitis: consider adalimumab, infliximab, certolizumab

Crohn's disease: consider adalimumab, infliximab, certolizumab, ustekinumab, IL23

Ulcerative colitis: consider adalimumab, infliximab, golimumab, tofacitinib, upadacitinib, ustekinumab

Pregnant or planning pregnancy: consider certolizumab

*N.B. this list of clinical conditions is not exhaustive. If there is more than one suitable treatment option the one with the lowest acquisition cost should be selected (see box 2).

Box 2: Best Value

Year 1	Subsequent years
1. Adalimumab biosimilar 2. Infliximab SC biosimilar 3. Etanercept biosimilar	1. Adalimumab biosimilar 2. Infliximab SC biosimilar 3. Etanercept biosimilar
4. Upadacitinib 5. Tofacitinib 6. Apremilast 7. Secukinumab 150mg	4. Secukinumab 150mg 5. Upadacitinib 6. Tofacitinib 7. Apremilast
8. Guselkumab 9. Certolizumab 10. Risankizumab 11. Bimekizumab standard dose 12. Golimumab 13. Ustekinumab 13. Ixekizumab standard dose 14. Bimekizumab heavy load 15. Secukinumab 300mg 16. Ixekizumab heavy load	8. Guselkumab 9. Risankizumab 10. Bimekizumab 11. Secukinumab 300mg 12. Ixekizumab 13. Golimumab 14. Certolizumab 15. Ustekinumab

Green: preferred, best value medicine

Amber: to be used when green not suitable

Red: least cost-effective. To be used when green/amber not suitable

IV option: infliximab IV biosimilar. Cost dependent on patient weight and infusion frequency. Additional costs: IV infusion preparation (pharmacy), administration (nursing), day case attendance.

Box 3: time to assess response

Adalimumab 12 weeks

Apremilast 16 weeks

Bimekizumab 16 weeks

Certolizumab 12 weeks

Etanercept 12 weeks

Golimumab 12 weeks

Guselkumab 16-24 weeks

Infliximab 12 weeks

Ixekizumab 16 weeks

Risankizumab 16 weeks

Secukinumab 16 weeks

Tofacitinib 12 week

Upadacitinib 12 weeks

Ustekinumab 24 weeks