Rheumatoid arthritis high-cost drugs pathway

NHS Pan Mersey Area Prescribing Committee

Failure of intensive therapy with a combination of standard DMARDs (usually methotrexate, hydroxychloroquine and sulphasalazine)

and DAS28>3.2

and DAS28 > 5.1

Filgotinib (TA676) or Upadacitinib (TA 744) +methotrexate OR monotherapy[1]
Or
Adalimumab +methotrexate (TA715) OR monotherapy[1]
Or
Etanercept +methotrexate (TA715) OR monotherapy[1]
Or
Infliximab +methotrexate (TA715)

Inadequate response[2] or adverse effect[3]

Adequate response[2] . Continue and monitor every six months

DAS >5.1

Considerations to guide choice of initial drug – see Box A next page

AntiTNF+methotrexate OR monotherapy (TA375) [1]
Initial or subsequent therapy
Or

Tocilizumab/sarilumab+methotrexate OR monotherapy (TA375, TA485, TA247) [1,4]
Initial or subsequent therapy
Or

Abatacept+methotrexate (TA375) OR monotherapy*
Initial or subsequent therapy[1,5]
Or

Rituximab+methotrexate OR monotherapy*
(? if seropositive)[1,6,7]
Initial** or subsequent therapy (TA195)
Or

Baricitinib (TA466), tofacitinib (TA480), upadacitinib (TA665) or filgotinib (TA676)+methotrexate OR monotherapy[1, 8]
Initial or subsequent therapy

Choice of initial and any subsequent drug to be a clinical decision based on individual patient clinical characteristics

Yes[3, 7, 9]

Inadequate response[2] or adverse effect[3]

1. If methotrexate intolerant recommend continue non-methotrexate DMARD if possible

2. Adequate response is defined as a moderate response measured using European League Against Rheumatism (EULAR) criteria at 6 months after starting therapy. However, where DAS28 improvement of 0.6 - 1.2 has been achieved but the patient still has active joint swelling and DAS28 > 3.9 this represents suboptimal disease control and treatment change should be considered.

**rituximab/abatacept monotherapy are not NICE approved but are locally commissioned*

***rituximab first-line is not NICE approved but is locally commissioned*

3. Allow "switching" between agents in case of initial or subsequent agent failure as follows, but continue only if adequate response:

Primary inefficacy - up to total of 6 sequential options if DAS28 > 5.1 or 4 sequential options if DAS28 > 3.2 - 5.1

- A-TNF - receptor (etanercept)
- A-TNF – antibody (others)
- Rituximab
- Tocilizumab or sarilumab
- Abatacept
- JAK inhibitor (baricitinib, upadacitinib, filgotinib or tofacitinib)

Secondary inefficacy - another approved high-cost drug may be used. Where secondary failure of efficacy may be a class effect, use another drug from an alternative drug class. Avoid using more than two anti-TNF agents unless involvement of anti-drug antibodies is the cause of failure.

Adverse effect, emerging contraindication - another approved high-cost drug may be used. Where adverse-effect, contraindication may be a class effect use another drug from an alternative drug class.

Box A Considerations to guide choice of initial drug

If no specific clinical circumstances are relevant, use drug with lowest acquisition cost. In most cases this will be biosimilar TNFi – etanercept or adalimumab

4. Tocilizumab monotherapy is superior to adalimumab monotherapy – strongly consider before anti-TNF (ADACTA study: 2013)

5. Abatacept may be more appropriate in individuals with a higher risk of infection (local specialist opinion)

6. Alternative biologic to rituximab may be more appropriate e.g. in seronegative patients, in younger patients (risk of hypogammaglobulinaemia following repeated courses) and patients with ongoing risk of infection.

7. Consider rituximab as 1st line if previous lymphoma, treated solid malignancy within last 5 years, contra-indication to Rx latent TB, history of demyelinating disease, connective tissue disease overlap, Felty's syndrome, interstitial lung disease. (ACR and EULAR guidelines)

8. Note MHRA/FDA cautions re Tofacitinib – suggest use only if no other options. Safety concerns may be a class effect so suggest JAKi are used first line only if no other suitable options

Box B Considerations to guide choice of subsequent drug

9. Consider trial of 2nd anti-TNF therapy with different mode of action to that used previously e.g. receptor > mAb or vice versa.

Avoid cycling of anti-TNF therapies if failed two anti-TNF due to inefficacy.

Box C Specific clinical circumstances that may influence use of a specific drug

Abatacept	Injection site reactions to anti TNF, infection risk, ACPA seropositive Consider using a non anti-TNF biologic (***rituximab, abatacept, tocilizumab***) if CTD/SLE overlap, CHF stage 3, Feltys syndrome Use monotherapy only when other agents contraindicated/ineffective
Adalimumab	Extra-articular features, co-existent conditions such as uveitis (TA460), psoriasis, Crohn's disease, Ulcerative Colitis
Certolizumab pegol	Women planning pregnancy, breast feeding (licensed)
Etanercept	Women planning pregnancy, infection risk (shortest half-life)
Golimumab	Consider if patient over 100kg (weight-based dosing), needle phobia/compliance issues, Ulcerative colitis
Infliximab	Needle phobia/compliance issues, unable to self-inject, psoriasis, Crohn's disease, Ulcerative Colitis, Extra-articular features eg rheumatoid vasculitis
Rituximab	Consider using a non anti-TNF biologic (***rituximab, abatacept, tocilizumab***) if CTD/SLE overlap, CHF stage 3, Feltys syndrome Consider rituximab as 1st line if previous lymphoma, treated solid malignancy within last 5 years, contra-indication to Rx latent TB, history of demyelinating disease, connective tissue disease overlap, Felty's syndrome, interstitial lung disease. *(ACR and EULAR guidelines)* Use monotherapy only when other agents contraindicated/ineffective
Tocilizumab Sarilimumab	Consider using a non anti-TNF biologic (***rituximab, abatacept, tocilizumab***) if CTD/SLE overlap, CHF stage 3, Feltys syndrome Methotrexate intolerant Systemic symptoms, high ESR/CRP, marked anaemia. Caution if history of diverticular disease
Baricitinib Filgotinib Tofacitinib Upadacitinib	Patient preference for oral agent/needle phobia, effective as monotherapy Avoid in women of child-bearing age, infection risk, history of herpes zoster Caution in renal impairment - tofacitinib reduce dose if CrCl <30ml/min, baricitinib reduce dose of CrCl 30-60ml/min, avoid if <30ml/min), upadacitinib use with caution in severe renal impairment), filgotinib - dose of 100mg daily is recommended in moderate or severe renal impairment (CrCl 15 to < 60 mL/min). end stage renal disease (CrCl < 15 mL/min) not recommended. Note MHRA/FDA cautions re Tofacitinib – suggest use only if no other options