

# STILL'S DISEASE (adult onset): biological agents in

The Pan Mersey Area Prescribing Committee recommends the prescribing of anakinra, etanercept, infliximab or tocilizumab in adult-onset Still's Disease RED

Anakinra is approved for treating Still's Disease (Adults and Children) under <u>NICE</u> <u>TA685</u> (March 2021)

Tocilizumab is commissioned by NHS England for adult-onset Still's Disease (210811P) (URN: 1609).

Use of Anti TNF for Arthritis Predominant – Local Agreement

NICE TA685 recommends anakinra as an option for adult-onset Still's disease that has responded inadequately to 2 or more conventional disease-modifying antirheumatic drugs (DMARDs).

Prescribing of anakinra, etanercept, infliximab or tocilizumab in adult-onset Still's Disease (AOSD) must be in accordance with the Pan Mersey pathway for the management of AOSD. [Link].

If a patient requires treatment with tocilizumab under the NHSE policy they should be discussed at the regional specialised commissioning MDT as per the agreed referral process.

Biological agents may be used in patients who are steroid dependent, or who have continued disease activity despite usual doses of oral corticosteroids and where addition of 2 or more DMARDs fails to control disease, or where not tolerated.

**Note**: Patients who are not eligible for treatment under this statement may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. In this situation, follow locally defined processes.

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APC administration provided by Midlands and Lancashire Commissioning Support Unit

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#### **Effectiveness**

Tocilizumab has shown positive results in patients with refractory AOSD in several case series. (1-4) Results from randomised placebo-controlled trials are available in systemic onset Juvenile Idiopathic Arthritis (Still's Disease) but not in the adult form of the disease. (5,6) In these trials patients generally responded rapidly and experienced sustained clinical remission over time. Moreover, the effect of tocilizumab persisted for >6months after its discontinuation. In AOSD tocilizumab seems to have beneficial effects on systemic and articular features and has a steroid sparing effect.

Anakinra efficacy is reported in retrospective studies<sup>(7-13)</sup> and one prospective randomised open-label study.<sup>(14)</sup> Most studies examined the resolution of systemic symptoms rather than articular symptoms. In almost all cases inflammatory markers reverted to normal within about 2 weeks and corticosteroids could be tapered and discontinued. However relapses occurred frequently on discontinuation.

For anti-TNF agents data from case reports, retrospective case series and one prospective open-label prospective trial are available. Complete remissions have been observed (15-19) but more effective for polyarticular disease (20-23) and less effective on systemic symptoms. (24-25)

The literature suggests that in these patients infliximab is more effective but no prospective studies confirm this. (26)

A number of case reports have described patients who have failed treatment with anti-TNF agents and have subsequently responded to alternative anti-TNF agents or anakinra, patients who have failed treatment with anakinra who have subsequently responded to tocilizumab, and a very limited number who have failed treatment with both anti-TNF agents and anakinra who have subsequently responded to tocilizumab.<sup>(27)</sup>. NICE TA685 recommends anakinra as an option for adult-onset Still's disease that has responded inadequately to 2 or more conventional disease-modifying antirheumatic drugs (DMARDs)<sup>(28)</sup>.

### Safety

Biological agents are contra-indicated in active tuberculosis or other severe infection, and in Class III or IV heart failure.

Caution should be exercised as biological agents increase risk of infections, and they should be used with caution in patients with history or at increased risk of tuberculosis, hepatitis B, malignancies and lymphoproliferative disorders, skin and other cancers, heart failure, blood dyscrasias, demyelinating disease – see <u>individual product</u> SPCs for further details.

Most common side-effects are infection, skin cancer, blood dyscrasias, hypersensitivity, increased lipids, electrolyte disturbances, mood alterations, headache, paraesthesias, visual disturbance, vertigo, tachycardia, hypertension, flushing, breathlessness, cough, GI pain, elevated LFTs, rash, worsening of psoriasis, muscle pain, renal impairment, injection site reaction, oedema and pyrexia. See individual product SPCs for further details.

## Cost

Cost of treatment per year:

Mean cost £12,582 per patient per year. Current cost in Pan Mersey area is estimated £10,000 per 100,000, possibly rising to £27,000 per 100,000 over 5 years.

### **Patient factors**

See individual product SPCs.

## **Prescribing information**

See individual product SPCs.

## Implementation notes

Prescribing should be retained by the specialist. Patients should be given the special alert card.

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#### References

- 1. Puechal X et al Arthritis Care Res 2011;63(1):155-159
- 2. Cipriani P et al Clin Rheumatol 2014; 33(1): 49-55
- 3. Elkayam O et al J Rheumatol 2014; 41(2): 244-247
- 4. Ortiz-Sanjuan F et al Arthritis Rheumatol 2014; 66(6): 1659-1665
- 5. De Benedetti F et al N Engl J Med 2012; 367(25):2385-2395
- 6. Yokota S et al Lancet 2008; 371(9617): 998-1006
- 7. Lequerre T et al Ann Rheum Dis 2008; 67(3): 302-308
- 8. Vasques G et al Ann Rheum Dis 2005;64(4): 647-648
- 9. Fitzgerald A et al Arthritis Rheum 2005; 52(6): 1794-1803
- 10. Kalliolias GD et al Ann Rheum Dis 2007; 66(6): 842-843
- 11. Kotter I et al Semin Arthritis Rheum 2007; 37(3): 189-197
- 12. Laskari K et al Arthrits Res Ther 2011;13(3): R91
- 13. Rudinskaya A et al J Clin Rheumatol 2003;9(5): 330-332
- 14. Nordstrom D et al J Rheumatol 2012;39(10): 2008-2011
- 15. Felson DT et al. Arthritis Rheum 1995; 38(6): 727-735
- 16. Husni ME et al. Arthritis Rheum 2002; 46(5): 1171-1176
- 17. Cavagna L et al Clin Exp Rheumatol 2001; 19(3): 329-332
- 18. Kraetsch HG et al Ann Rheum Dis 2001; 60 suppl 3: iii55-iii57
- 19. Kokkinos A et al Clin Rheumatol 2004; 23(1): 45-49
- 20. Gerfaud-Valentin et al Medicine 2014; 93(2): 91-99
- 21. Franchini S et al Arthritis Rheum 2010; 62(8): 2530-2535
- 22. Pay S et al Clin Rheumatol 2006; 25(5): 639-644
- 23. Kim H-A et al Rheumatol Int 2012; 32(5): 1291-1298
- 24. Gerfaud-Valentin M et al Autoimmune Rev 2014; 13(7):708-722
- 25. Fautrel B et al Ann Rheum Dis 2005; 64(2): 262-266
- 26. Jamilloux Y et al Ther Clin Risk Management 2015; 11: 33-43
- 27. Al-Homood I. Rheumatology 2014;53: 32-38
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