

**NICE TA 247: Tocilizumab for the treatment of rheumatoid arthritis
(Rapid review of technology appraisal guidance 198)**

1	<p>Name of Commissioning Team</p> <p>Specialist Services Commissioning Team</p>
2	<p>Summary of NICE TA 247</p> <p>TA 247 replaces NICE technology appraisal guidance 198 issued in August 2010. TA 247 recommends that tocilizumab in combination with methotrexate is recommended <u>as an option</u> (among many other existing treatments) for the treatment of rheumatoid arthritis (RA) in adults if:</p> <ul style="list-style-type: none"> • the disease has responded inadequately to disease-modifying anti-rheumatic drugs (DMARDs) and it is used as described for tumour necrosis factor (TNF) inhibitor treatments in “Adalimumab, etanercept and infliximab for the treatment of RA” (NICE technology appraisal guidance 130), specifically the recommendations on disease activity and choice of treatment or • the disease has responded inadequately to DMARDs and a TNF inhibitor and the person cannot receive rituximab because of a contraindication to rituximab, or because rituximab is withdrawn because of an adverse event, and tocilizumab is used as described for TNF inhibitor treatments in “Adalimumab, etanercept, infliximab, rituximab and abatacept for the treatment of RA after the failure of a TNF inhibitor” (NICE technology appraisal guidance 195), specifically the recommendations on disease activity or • the disease has responded inadequately to one or more TNF inhibitor treatments and to rituximab • and the manufacturer provides tocilizumab with the discount agreed as part of the patient access scheme.
3	<p>Number of people in Northern Ireland expected to take up service/therapy (new cases per year)</p> <p>TA 247 updates and replaces TA 198 (August 2010). TA 198 recommended the use of tocilizumab as a possible treatment for people with RA who have:</p> <ul style="list-style-type: none"> • moderate to severe RA and, • have responded inadequately to at least one TNF inhibitor and rituximab <p>According to April 2012 figures on the use of biologic drugs in severe inflammatory arthritis, there are approximately 50 adult patients currently on tocilizumab in Northern Ireland. We do not expect that this number will change with the implementation of TA 247.</p>

4	Outcomes
4.1	<p>Additional life expectancy gain / progress improvement</p> <p><u>Tocilizumab as a treatment option after an inadequate response to conventional DMARDs:</u> Studies show that 59.2% of people on tocilizumab will have at least a 20% improvement in swollen joint count and tender joint count versus 25.8% of people on placebo.</p> <p><u>Tocilizumab as a treatment option after an inadequate response to a TNF-inhibitor:</u> Studies show that patients on tocilizumab showed a 3.16 reduction in their DAS28 score¹ compared to a decrease of 0.95 for placebo.</p> <p>1. DAS28 = A disease activity score used in the assessment of patients with RA. It is calculated using a formula that includes counts for tender and swollen joints, an evaluation of general health by the patient, and a measure of circulating inflammatory markers. A DAS28 score greater than 5.1 is considered to be indicative of high disease activity, between 5.1 and 3.2 of moderate disease activity and less than 3.2 of low disease activity. A patient scoring less than 2.6 is defined as being in remission.</p>
4.2	<p>Reduction in morbidity</p> <p>In patients with RA, tocilizumab has been shown to reduce the rate of progression of joint damage and to improve physical function.</p>
4.3	<p>Cost per patient per annum</p> <p>Drug costs from BNF 63 (March 2012):</p> <p>In adult patients with RA, tocilizumab is given as an intravenous infusion at a dose of 8mg/kg body weight, once every four weeks. Assuming the average patient weighs 70kg, a dose of 560mg is required every four weeks.</p> <p>1 x 400mg vial = £512.00 1 x 200mg vial = <u>£256.00</u> Total = £768.00 every 4 weeks = £9984.00 per patient per year.</p> <p>(This does not include administration costs)</p> <p>The manufacturer (Roche) has agreed a patient access scheme that makes tocilizumab available to the NHS with a discount. The details of this scheme are commercial in confidence.</p>
4.4	<p>In year cost per patient per annum (for new and prevalent cases)</p> <p>We do not expect TA247 to have a significant impact on NHS resources as it only represents a further treatment option amongst many other existing treatments for people with RA. The manufacturer has provided a patient access scheme, and it is not expected that treatment with tocilizumab will cost significantly more than with other existing options.</p>

4.5	<p>Any cost savings and how these will be secured</p> <p>No cost savings are anticipated.</p>
4.6	<p>Recurrent overall cost</p> <p>The manufacturer has provided a patient access scheme, and it is not expected that treatment with tocilizumab will cost significantly more than with other existing options.</p>
4.7	<p>Cost per QALY</p> <p>In patients who have shown an inadequate response to two conventional DMARDs, NICE estimated the incremental cost-effectiveness ratio (ICER) to be £28,400 per QALY gained.</p> <p>In patients who have shown an inadequate response to conventional DMARDs and who are unable to use rituximab, NICE estimated the ICER to be between £10,700 - £30,100 per QALY gained, depending on which other DMARD or TNF-inhibitor is used previously</p> <p>In patients who have shown an inadequate response to a TNF-inhibitor, NICE estimated the ICER to be £18,500 per QALY gained.</p>
4.8	<p>Other treatments available for this condition</p> <p>Tocilizumab would be used as a second-, third-, or fourth-line treatment in adults with RA. Other NICE-recommended options include abatacept, adalimumab, certolizumab, etanercept, golimumab, infliximab, and rituximab.</p>
4.9	<p>Readiness to implement</p> <p>There are no barriers to implementation.</p>
5	<p>DHSSPS Legislative / Policy Caveats</p> <p>This advice does not override or replace the individual responsibility of health professionals to make appropriate decisions in the circumstances of their individual patients, in consultation with the patient and/or guardian or carer. This would, for example, include situations where individual patients have other conditions or complications that need to be taken into account in determining whether the NICE guidance is fully appropriate in their case.</p>
6	<p>What will Commissioning Team do to secure funding for the implementation of this TA including any proposals for disinvestment</p> <p>It is not anticipated that there will be any significant additional cost over and above the resources identified to fully achieve the commissioning direction targets as referenced in section 5 for biologic therapies for rheumatoid arthritis.</p> <p>The regime has NICE approval and the estimated annual incidence of new patients</p>

	<p>per annum can be accommodated within the projected resources required to achieve and maintain the waiting time target for these regimes in 2012/2013.</p> <p>Access to NICE approved therapies for rheumatoid conditions within a 3 month waiting period has been identified in the commissioning directions as a priority for 2012/2013 and is therefore a high priority for the HSCB.</p>
7	<p>Commissioning arrangements</p> <p>The treatment will be commissioned through the existing Investment Proposal Templates and subsequent negotiation process as part of the overall commissioning arrangements for the full suite of NICE approved biologic therapies for rheumatoid conditions to achieve waiting time standards.</p>
8	<p>Monitoring arrangements</p> <p>HSCB currently reviews monthly monitoring information from all Trusts on all biologics used, number of patients treated (adults and children), and number of patients waiting to commence treatment by banded waiting times.</p> <p>The monitoring pro forma will be adapted to capture information in respect of this regime and this group of patients.</p> <p>The Specialist Service Commissioning Team has a long established RA biologics sub group which meets on a bi monthly basis. Service monitoring including the review of the monthly data returns is a key function of this group.</p>