East Surrey CCG, Guildford & Waverley CCG, North West Surrey CCG, Surrey Downs CCG, Surrey Heath CCG, Crawley CCG, Horsham & Mid-Sussex CCG

Briefing Paper for Prescribing Clinical Network on NICE Technology Appraisals: Local implementation

NICE TA Guidance	Certolizumab pegol and secukinumab for treating active psoriatic arthritis after inadequate response to DMARDs NICE Technology Appraisal guidance 445		
Available at	https://www.nice.org.uk/guidance/ta445		
Date of issue	24th May 2017	**Implementation deadline**	24th August 2017

Medicine details[1]	
Name, brand name and manufacturer	**Certolizumab pegol (Cimzia®, UCB Pharma)** is a biological therapy (a recombinant humanised antibody Fab' fragment against tumour necrosis factor [TNF]-alpha) and is conjugated to polyethylene glycol. --- **Secukinumab (Cosentyx®, Novartis)** is a biological therapy (a fully human monoclonal antibody that selectively neutralises interleukin 17A [IL-17A]).
Licensed indication	**Certolizumab pegol** *Psoriatic arthritis* Cimzia®, in combination with methotrexate (MTX), is indicated for the treatment of active psoriatic arthritis in adults when the response to previous DMARD therapy has been inadequate. Cimzia® can be given as monotherapy in case of intolerance to methotrexate or when continued treatment with methotrexate is inappropriate. --- **Secukinumab** Psoriatic arthritis Cosentyx®, alone or in combination with methotrexate (MTX), is indicated for the treatment of active psoriatic arthritis in adult patients when the response to previous disease-modifying anti-rheumatic drug (DMARD) therapy has been inadequate.
Formulation	**Certolizumab pegol** Each pre-filled pen and each pre-filled syringe contains 200 mg certolizumab pegol in one ml. --- **Secukinumab** Each pre-filled syringe and each pre-filled pen contains 150 mg secukinumab in 1 ml.
Usual dosage	**Certolizumab pegol** Loading dose The recommended starting dose of Cimzia® for adult patients is 400 mg (given as 2 subcutaneous injections of 200 mg each) at weeks 0, 2 and 4. For rheumatoid arthritis and psoriatic arthritis, MTX should be

	continued during treatment with Cimzia® where appropriate. Maintenance dose After the starting dose, the recommended maintenance dose of Cimzia® for adult patients with psoriatic arthritis is 200 mg every 2 weeks. Once clinical response is confirmed, an alternative maintenance dosing of 400 mg every 4 weeks can be considered. MTX should be continued during treatment with Cimzia® where appropriate. This is the same recommended dose and schedule as the NICE TA. --- **Secukinumab** For patients with concomitant moderate to severe plaque psoriasis or who are anti-TNFα inadequate responders (IR), the recommended dose is 300 mg by subcutaneous injection with initial dosing at Weeks 0, 1, 2 and 3, followed by monthly maintenance dosing starting at Week 4. Each 300 mg dose is given as two subcutaneous injections of 150 mg. For other patients, the recommended dose is 150 mg by subcutaneous injection with initial dosing at Weeks 0, 1, 2 and 3, followed by monthly maintenance dosing starting at Week 4. This is the same recommended dose and schedule as the NICE TA. *This is the current dose considered by NICE as part of the NICE evaluation. Subsequent changes in the license following NICE publication will need to be considered by the Prescribing Clinical Network and will not be routinely funded by local commissioners.*

Disease and potential patient group	
Brief description of disease[2]	Psoriatic arthritis is a type of arthritis that develops in some people with the skin condition psoriasis. It typically causes affected joints to become inflamed (swollen), stiff and painful. Like psoriasis, psoriatic arthritis is a long-term condition that can get progressively worse. In severe cases, there's a risk of the joints becoming permanently damaged or deformed, which may require surgical treatment. However, with an early diagnosis and appropriate treatment, it's possible to slow down the progression of the condition and minimise or prevent permanent damage to the joints.

Potential patient numbers per 100,000[3]

The potential number of patients in the PCN members' CCGs is calculated using national assumptions from the NICE resource report for NICE TA 433: Apremilast for treating active psoriatic arthritis (Feb 2017), which gives the numbers of people with active psoriatic arthritis who are eligible for TNF inhibitors.

Certolizumab pegol and secukinumab are further options for the treatment of active psoriatic arthritis after inadequate response to disease-modifying anti-rheumatic drugs (DMARDs).

Therefore no significant change in resource impact is anticipated.

Table 1: Number of people eligible for treatment with TNF-alpha inhibitors in England.

Population	**Proportion of previous row (%)**	**Number of people**
Total adult population		42,724,917
People with psoriatic arthritis	0.65	278,000
People who can have TNF-alpha inhibitors	2.4	6,700

Table 2: Potential number of patients eligible for treatment with TNF-alpha inhibitors at CCG level (using national assumptions as per Table 1):

CCG	**Population**	**Prevalence of psoriatic arthritis**	**Proportion of patients who can have TNF-alpha inhibitors**
Crawley	83,931	546	13
East Surrey	139,837	909	22
Guildford and Waverley	165,066	1073	26
Horsham and Mid-Sussex	177,808	1156	28
North West Surrey	266,608	1733	42
Surrey Downs	222,523	1446	35
Surrey Heath	74,455	484	12

SUMMARY

Guidance[4]

Recommendations:

1.1 Certolizumab pegol alone, or in combination with methotrexate, is recommended as an option for treating active psoriatic arthritis in adults only if:

- it is used as described in the NICE technology appraisal guidance on etanercept, infliximab and adalimumab for the treatment of psoriatic arthritis (recommendations 1.1 and 1.2) or
- the person has had a tumour necrosis factor (TNF)-alpha inhibitor but their disease has stopped responding after the first 12 weeks.

Certolizumab pegol is only recommended if the company provides it as agreed in the patient access scheme.

1.2 Secukinumab alone, or in combination with methotrexate, is recommended as an option for treating active psoriatic arthritis in adults only if:

- it is used as described in the NICE technology appraisal guidance on etanercept, infliximab and adalimumab for the treatment of psoriatic arthritis (recommendations 1.1 and 1.2) or
- the person has had a TNF-alpha inhibitor but their disease has not responded within the first 12 weeks or has stopped responding after 12 weeks or
- TNF-alpha inhibitors are contraindicated but would otherwise be considered (as described in NICE technology appraisal guidance on etanercept, infliximab and adalimumab for the treatment of psoriatic arthritis).

Secukinumab is only recommended if the company provides it as agreed in the patient access scheme.

1.3 Assess the response to certolizumab pegol and secukinumab after 12 weeks and 16 weeks of treatment respectively. Only continue treatment if there is clear evidence of response, defined as an improvement in at least 2 of the 4 Psoriatic Arthritis Response Criteria (PsARC), 1 of which must be joint tenderness or swelling score, with no worsening in any of the 4 criteria. People whose disease has a Psoriasis Area and Severity Index (PASI) 75 response but whose PsARC response does not justify continuing treatment should be assessed by a dermatologist, to determine whether continuing treatment is appropriate based on skin response (as described in the NICE technology appraisal guidance on etanercept, infliximab and adalimumab for the treatment of psoriatic arthritis, recommendation 1.3).

1.4 When using the PsARC healthcare professionals should take into account any physical, sensory or learning disabilities or communication difficulties that could affect a person's responses to components of the PsARC and make any adjustments they consider appropriate.

1.5 This guidance is not intended to affect the position of patients whose treatment with certolizumab pegol and secukinumab was started within the NHS before this guidance was published. Treatment of those patients may continue without change to whatever funding arrangements were in place for them before this guidance was published until they and their NHS clinician consider it appropriate to stop.

Cost implications*,[4,5]

Cost:

Certolizumab pegol

Certolizumab pegol costs £357.50 per 200-mg prefilled pen or prefilled syringe.

Secukinumab

Secukinumab costs £1,218.78 per 2 × 150-mg prefilled pen or syringe.

Annual or monthly cost per patient:

Certolizumab pegol

Potentially 28 x 200mg dose per year (according to loading and maintenance schedule):
Loading dose – 400mg at weeks 0,2 and 4 = 6 x 200mg dose = 6 x £357.50 = £2,145
Maintenance dose – 200mg every 2 weeks or 400mg every 4 weeks = 22 x £357.50 = £7,865
Total cost = £10,010
PAS (see below,[first 12 weeks are free of charge]) = £3,575
Actual cost = £6435 per year (first year)
Cost subsequent years = £10,010

Secukinumab:

Potentially 16 x 300mg doses per year (according to loading and maintenance schedule):
Loading dose – 300mg at weeks 0,1,2 and 3 = 4 x 300mg dose = 4 x £1,218.78 = £4,875.12
Maintenance dose – monthly 300mg starting at week 4 = 12 x 300mg dose = 12 x £1,218.78 = £14,625
Total cost = £16,770 (without PAS, see below)

Availability of PAS and details (if appropriate):

Certolizumab pegol

The company has agreed a patient access scheme with the Department of Health. The first 12 weeks of therapy with certolizumab pegol will be free of charge.

Secukinumab:

The company has agreed a patient access scheme with the Department of Health. This scheme provides a simple discount to the list price of secukinumab, with the discount applied at the point of purchase or invoice. The level of the discount is commercial in confidence.

The Department of Health considered that these patient access schemes do not constitute an excessive administrative burden on the NHS.

Availability of homecare service (if appropriate):

Yes – already in place.

Resource impact statement:

No significant resource impact is anticipated.

Certolizumab pegol and secukinumab are further options for the treatment of active psoriatic arthritis after inadequate response to disease-modifying anti-rheumatic drugs (DMARDs). Therefore no significant change in resource impact is anticipated.

A local decision was made to commission the use of certolizumab pegol before the publication of this TA and therefore is already included in the local commissioning arrangements and pathway.

**NICE funding requirements are based on Quality Adjusted Life Years (QALY) threshold. If there is evidence that the incremental cost rises above this threshold in the future, the PCN may reconsider the commissioning status.*

Alternative treatments and cost per patient per year[6,7]

Other NICE recommended products:

Table 1: Adalimumab, etanercept, infliximab, golimumab and apremilast.

Drug cost	Purchase quantity (taken from BNF)	Cost taken from BNF.	Cost per dose	Quantity per dose	Weekly cost	Annual Cost
Adalimumab	2 pre filled packages : 50 mg/1ml	£704.28	£352.14	50 mg BI weekly	£176.07	£9,156
Etanercept	4 pre filled packages : 50 mg/1ml	£656.00	£164.00	50 mg once weekly	£164.00	£8,528
Infliximab	100 mg/1ml	£377.00	£377.00	4 Vials every 8 weeks	£188.50	£9,802
Golimumab	50 mg/1ml	£762.97	£762.97	50 mg once monthly	£176.07	£9,156
Apremilast	56, 30mg tablets	£550.00	£9.82	30 mg twice daily	£137.50	£7,150

Table 2: Ustekinumab estimated average annual treatment cost per patient.

Treatment	Regimen	First year drug cost	Annual maintenance drug cost	Total annual maintenance cost including administration per patient
Ustekinumab	45 mg in weeks 1 and 4, then every 12 weeks by subcutaneous injection[1].	£10,735	£9,304	£9,304

[1] A dose of 90 mg may be given by subcutaneous injection to people weighing more than100 kg (a patient access scheme is in place for this treatment).

Impact to patients

- An additional treatment option for psoriatic arthritis would be valued by patients.
- Both medicines are available under a homecare service so will be delivered directly to the patient. When the patient is confident in self-administering, this reduces the number of hospital appointments to those required for review and/or monitoring.

Impact to primary care prescribers

- This is a PbRe drug and is commissioned by CCGs for use in secondary care. There should be no prescribing in primary care.
- Primary care prescribers should be aware that their patient is receiving certolizumab pegol or secukinumab in order to be alert to potential side-effects and interactions with other medicines prescribed in primary care.

Impact to secondary care

- The initiation, administration and on-going treatment is managed by secondary care.
- Homecare arrangements will be managed by the trust.
- Both medicines are available on homecare and as a subcutaneous injection so once the patient is confident in self-administering, will only require appointments for review and/or monitoring.
- An additional treatment option for treating psoriatic arthritis would be valued by clinicians.

Impact to CCGs
• The technology is commissioned by clinical commissioning groups (CCGs). • Providers are NHS hospital trusts.   • Consider that there is a cohort of patients who have gone through the maximum lines of treatment in the pathway but the new TA gives another option i.e. secukinumab for a patient who has already had 2 lines of treatment with TNF inhibitors.
Implementation
• NICE TA implementation must be within 90 days of publication – by 24 August 2017 • Blueteq forms to be developed • Trusts to initiate homecare for this indication • Pathway to be discussed at Rheumatology Network and subsequently at PCN.
Recommendation to PCN
PbRe: Y **Recommended traffic light status:** RED **Additional comments:**

References:

1 Specification of Product Characteristics.
- 1a Cimzia 200 mg solution for injection in pre-filled syringe. Available at: https://www.medicines.org.uk/emc/medicine/22323 Accessed <15.6.17>
- 1b Cosentyx 150 mg solution for injection in pre-filled syringe and pre-filled pen. Available at: https://www.medicines.org.uk/emc/medicine/29848 Accessed <15.6.17>

2 NHS Choices. Psoriatic arthritis. Available at: http://www.nhs.uk/conditions/psoriatic-arthritis/Pages/Introduction.aspx Accessed <15.6.17>

3 NICE Resource impact report: Apremilast for treating active psoriatic arthritis (TA433). Published 22 February 2017. Available at: https://www.nice.org.uk/guidance/ta433/resources/resource-impact-report-4367148013 Accessed <23.2.17>

4 NICE Technology appraisal 445: Certolizumab pegol and secukinumab for treating psoriatic arthritis after inadequate response to DMARDs. Published 24 May 2017. Available at: https://www.nice.org.uk/guidance/ta445 Accessed <15.6.17>

5 NICE Resource impact report: Certolizumab pegol and secukinumab for treating active psoriatic arthritis after inadequate response to DMARDs. Published 24 May 2017. Available at: https://www.nice.org.uk/guidance/ta445/resources/resource-impact-statement-4481359309 Accessed <15.6.17>

6 NICE Resource impact template: Apremilast for treating active psoriatic arthritis (TA433). Published 22 February 2017. Available at: https://www.nice.org.uk/guidance/ta433/resources Accessed <23.2.17>

7 Ustekinumab Costing statement: Implementing the NICE guidanceon ustekinumab for treating active psoriatic arthritis (rapid review of technology appraisal guidance 313) (TA340). Available at:

https://www.nice.org.uk/guidance/ta340/resources/costing-statement-pdf-428499037
Accessed <21.6.17>

Prepared by:

Tejinder Bahra, Lead Commissioning Pharmacist, Surrey Downs CCG

Declaration of Interest:

Pharmacy Management meeting sponsored by Novartis on 21st May 2015.

This was a Pharmacy Management meeting which was non-clinical and non-promotional (the topic was 'Improving personal effectiveness to achieve enhanced outcomes'.

No meal taken as provided own. Travel expenses (claimed from Pharmacy Management): £39.84

Date: 16.6.17

Reviewed by:

Declaration of Interest:

Date:

VERSION CONTROL SHEET

Version	Date	Author	Status	Comment
1	16.6.17	T Bahra	Draft	Out for consultation
2	21.6.17	T Bahra	Draft	Comments incorporated
3	29.6.17	T Bahra	Final	Reviewed at Rheumatology Network meeting 28.6.17

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Comments on briefing paper for Prescribing Clinical Network

Medicine and proposed indication	Certolizumab pegol and secukinumab for treating active psoriatic arthritis after inadequate response to DMARDs NICE Technology Appraisal guidance 445
Prepared by	Name, designation and organisation
Comments on evidence review	
Additional evidence and references for consideration	Include any additional evidence and references you would like to submit for inclusion in the evidence review
Specific clinical questions	Specific questions arising from review
Other colleagues who should be contacted	Include name, designation and contact details of any other colleagues who should be consulted about this evidence