

MEDICATION COVERAGE POLICY

PHARMACY AND THERAPEUTICS ADVISORY COMMITTEE



POLICY:	Ankylosing Spondylitis (AS)	P&T DATE:	06/20/2023
CLASS:	Rheumatology/Anti-inflammatory Disorders	REVIEW HISTORY	11/22, 05/21, 02/08, 05/10, 02/12, 10/14, 02/16, 02/17, 02/18, 05/19, 05/20
LOB:	Medi-Cal	(month/year)	

This policy has been developed through review of medical literature, consideration of medical necessity, generally accepted medical practice standards, and approved by the HPSJ/MVHP Pharmacy and Therapeutic Advisory Committee.

Effective 1/1/2022, the Pharmacy Benefit is regulated by Medi-Cal Rx. Please visit <https://medicalrx.dhcs.ca.gov/home/> for portal access, formulary details, pharmacy network information, and updates to the pharmacy benefit.

All medical claims require that an NDC is also submitted with the claim. If a physician administered medication has a specific assigned CPT code, that code must be billed with the correlating NDC. If there is not a specific CPT code available for a physician administered medication, the use of unclassified CPT codes is appropriate when billed with the correlating NDC.

OVERVIEW

Ankylosing Spondylitis (AS) is an inflammatory condition that usually involves the spine.¹ Unlike rheumatoid arthritis (RA), oral DMARDs (methotrexate, leflunomide, etc) have not been effective in the treatment of AS. NSAIDs (ibuprofen, naproxen, etc) and physical therapy are first-line treatment. In patients who are symptomatic despite NSAID treatment, treatment with TNF biologics are recommended. This review will examine the treatment guidelines of AS, the currently available AS drug products, and their coverage criteria. The purpose of this coverage policy is to review the available agents (Table 1) and distinguish where the medications may be billed to. For agents listed for coverage under the medical benefit, this coverage is specific to outpatient coverage only (excludes emergency room and inpatient coverage).

Table 1. Available Ankylosing Spondylitis Agents (Current as of 4/2023)

CPT Code	Generic Name (Brand Name)	Available Strengths	Pharmacy Benefit	Outpatient Medical Benefit (Restrictions)
TNF-inhibitors				
J0135	Adalimumab (Humira, Humira CF)	20mg/0.4ml, 40mg/0.8ml 40mg/0.4ml	Yes	No
--	Adalimumab-atto (Amjevita)	40 mg/0.8 mL, 20 mg/0.4 mL	Yes	No

J1438	Etanercept (Enbrel)	50mg/ml, 25mg/ml,	Yes	No
Q5103	Infliximab-dyyb (Inflectra)	100mg IV vial	Yes	Yes (PA)
Q5104	Infliximab-abda (Renflexis)			
J1745	Infliximab (Remicade)			
Q5121	Infliximab-axxq (Avsola)			
J1602	Golimumab (Simponi)	50mg/4ml IV vial, 100mg/ml, 50mg/0.5ml auto- injector, 50mg/0.5ml 100mg/ml prefilled syringe	Yes	Yes, for vials (PA)
J0717	Certolizumab (Cimzia)	200mg	Yes, for pre-filled syringes	Yes, for lyophilized solutions (PA)
IL-17 Inhibitors				
--	Secukinumab (Cosentyx)	150mg/ml	Yes	No
--	Ixekizumab (Taltz)	80mg/ml	Yes	No
JAK Inhibitors				
--	Tofacitinib (Xeljanz)	5mg IR, 11mg ER tablet	Yes	No
--	Upadacitinib (Rinvoq)	15mg tablet	Yes	No

⊕ **EVALUATION CRITERIA FOR APPROVAL/EXCEPTION CONSIDERATION**

Below are the coverage criteria and required information for agents with medical benefit restrictions. This coverage criteria has been reviewed and approved by the HPSJ/MVHP Pharmacy & Therapeutics (P&T) Advisory Committee. For agents that do not have established prior authorization criteria, HPSJ/MVHP will make the determination based on Medical Necessity criteria as described in HPSJ/MVHP Medical Review Guidelines (UM06).

Biologics

1st line—Infliximab (Inflectra, Renflexis, Remicade, Avsola)

- Coverage Criteria:** Reserved for documented symptomatic AS despite treatment with NSAIDs (unless NSAID-intolerant). An adequate trial is defined as at least 2 different NSAIDs tried over 1 month or 2 different NSAIDs over 2 months.
- Limits:** None
- Required Information for Approval:** Prescription history showing at least 2 NSAIDs tried.
- Other Notes:** Must be initiated by a rheumatologist.

2nd line— Golimumab (Simponi)

- Coverage Criteria:** Reserved for treatment failure to Adalimumab, Etanercept, or Infliximab.
- Limits:** None
- Required Information for Approval:** Prescription history showing at least 3 month trial of one first line agent (Adalimumab, Etanercept, or Infliximab).
- Other Notes:** Must be initiated by a rheumatologist.

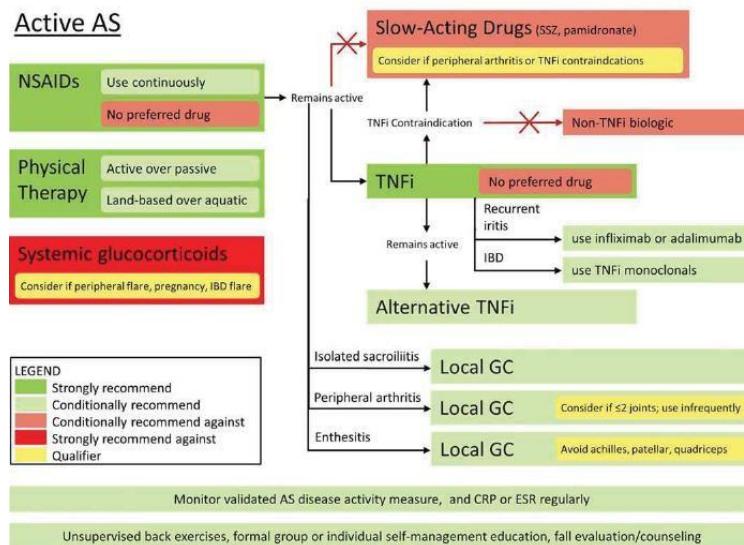
2nd line— Certolizumab (Cimzia)

- Coverage Criteria:** Reserved for treatment failure to Adalimumab, Etanercept, or Infliximab OR women that are currently pregnant or breastfeeding.
- Limits:** None
- Required Information for Approval:** Prescription history showing at least 3 month trial of one first line agent (Adalimumab, Etanercept, or Infliximab) OR pregnancy/breastfeeding status.
- Other Notes:** Must be initiated by a rheumatologist.

CLINICAL JUSTIFICATION

The goals of treatment are to reduce symptoms to maintain body function and quality of life. The *2015 American College of Rheumatology (ACR)/Spondylitis Association of America (SAA)/Spondyloarthritis Research and Treatment Network (SRTN) Guidelines²* recommends the following:

Figure 1: ACR/SAA/SRTN active AS Treatment Algorithm

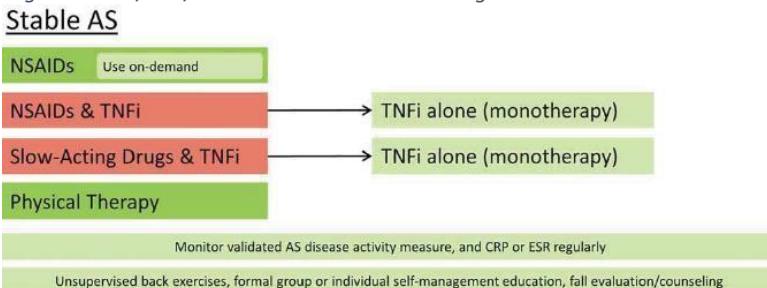


Active AS

- NSAIDs and physical therapy are first-line treatment.
 - The guidelines define “**adequate trial**” as “lack of response (or intolerance) to at least 2 different NSAIDs over 1 month or incomplete responses to at least 2 different NSAIDs over 2 months.”
- In patients who are symptomatic despite NSAID treatment, treatment with TNF biologics are recommended.

- There is insufficient evidence to favor one TNF biologic over another. However, experts agreed that in patients with AS and inflammatory bowel disease, infliximab or adalimumab is preferred over etanercept due to lower rates of iritis.
 - For patients with active AS despite treatment with TNF biologic, the guidelines recommend switching to another TNF biologic (as opposed to adding a DMARD).
- According to the *2019 ACR/SAA/SRTN Recommendations for the Treatment of Ankylosing Spondylitis and Nonradiographic Axial Spondyloarthritis* guidelines, the guidelines recommend for the consideration of the use of biological disease-modifying antirheumatic drugs (bDMARDs) in patients with persistently high disease activity despite conventional treatments, with a preference for TNFi therapy over interleukin-17 inhibitors (IL-17i).²⁸
- Methotrexate and leflunomide have shown to have minimal benefit and are associated with side effects. The benefits did not outweigh the risks and, therefore, are generally not recommended.
 - Sulfasalazine was shown to have a small benefit on pain relief and may be an option for patients who cannot use TNF biologics.
 - DMARDs are preferred over non-TNF biologics (abatacept, tocilizumab, ustekinumab, etc) due to questionable efficacy and study bias.
- Systemic glucocorticoids are not recommended due to lack of strong safety and efficacy data.

Figure 2: ACR/SAA/SRTN Stable AS Treatment Algorithm



Stable AS

- For patients with stable AS or on stable treatment regimen, experts recommend using NSAIDs on an as-needed basis.
- Patients with stable AS receiving both a TNF biologic and NSAIDs or a TNF biologic with DMARDs may consider discontinuing the NSAID or DMARD and continuing the TNF biologic as monotherapy.

The efficacy between TNF biologics do not differ significantly but the cost may vary due to differences in administration frequency (twice monthly vs. weekly vs. monthly, and so forth.) Therefore, HPSJ/MVHP's order of preference of the biologic therapies are based on the cost-benefit ratio where the first-line biologics are agents associated with the lowest cost-benefit ratio.

REFERENCES

1. Ruderman E and Tambar S. Rheumatoid Arthritis. American College of Rheumatology. Updated August 2012. Accessed on June 22, 2015. Available at:
[https://www.rheumatology.org/Practice/Clinical/Patients/
Diseases And Conditions/Rheumatoid Arthritis/](https://www.rheumatology.org/Practice/Clinical/Patients/Diseases%20And%20Conditions/Rheumatoid%20Arthritis/)
2. Singh J, Furst DE, Bharat A, et al. 2012 Update of the 2008 American College of Rheumatology Recommendations for the use of disease-modifying antirheumatic drugs and biologic agents in the treatment of rheumatoid arthritis. *American College of Rheumatology*. 2012; 64(5): 625-639.
3. Yoo DH, Racewicz A, Brzezicki J, et al. A phase III randomized study to evaluate the efficacy and safety of CT-P13 compared with reference infliximab in patients with active rheumatoid arthritis: 54-week results from the PLANETRA study. *Arthritis Res Ther*. 2016;18:82.
4. ClinicalTrials.Gov. Efficacy and Safety Study of ABP 501 Compared to Adalimumab in Subjects With Moderate to Severe Rheumatoid Arthritis. October 23, 2016.
<https://clinicaltrials.gov/ct2/show/NCT01970475>. Accessed January 22, 2017.
5. Griffiths CE, et al. The EGALITY study: A confirmatory, randomised, doubleblind study comparing the efficacy, safety and immunogenicity of GP2015, a proposed etanercept biosimilar, versus the originator product in patients with moderate to severe chronic plaque-type psoriasis. *Br J Dermatol*. 2016 Oct 27. doi: 10.1111/bjd.15152.
6. Dapavo P, et al. The infliximab biosimilar in the treatment of moderate to severe plaque psoriasis. *Journal of American Academy of Dermatology*. 2016 Oct;75(4):736-9.
7. FIMEA. Interchangeability of Biosimilars—Position of Finnish Medicines Agency Fimea. May 22, 2015.
http://www.fimea.fi/instancedata/prime_product_julkaisu/fimea/embeds/fimeawwwstructure/29197_Biosimilaarien_vaihtokelpoisuus_EN.pdf. Accessed January 22, 2017.
8. FDA. Summary Minutes of the Arthritis Advisory Committee Meeting. July 12, 2016.
<http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/ArthritisAdvisoryCommittee/UCM520027.pdf>. Accessed January 21, 2017.
9. Dörner T, Strand V, Cornes P, et al. The changing landscape of biosimilars in rheumatology. *Ann Rheum Dis*. 2016; 75:974–82. doi:10.1136/annrheumdis-2016-209166
10. FDA. Biosimilars: Questions and Answers Regarding implementation of Biologics Price Competition and Innovation Act of 2009. April 2015.
<http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM444661.pdf>. Accessed January 21, 2017
11. Dapavo P, et al. The infliximab biosimilar in the treatment of moderate to severe plaque psoriasis. *Journal of American Academy of Dermatology*. 2016 Oct;75(4):736-9
12. Results from the NOR-SWITCH study support switch from Remicade to Remsima (biosimilar infliximab). Mundipharma. 19 October 2016. <http://www.mundipharma.com/docs/default-source/defaultdocument-library/161019-ueg-press-release-final.pdf?sfvrsn=0>. Accessed 2 Feb 2017.
13. Baeten D, Sieper J, Braun J, et al. Secukinumab, an Interleukin-17A Inhibitor, in Ankylosing Spondylitis. *N Engl J Med*. 2015;373(26):2534-48.
14. Maxwell LJ, Zochling J, Boonen A, et al. Anti-TNF-alpha drugs for treating ankylosing spondylitis. *Cochrane Review*. Last updated 18 April 2015. Accessed 6 February 2016. Available at:
http://www.cochrane.org/CD005468/MUSKEL_antitnf-alpha_drugs_for_treating_ankylosing_spondylitis.
15. Maxwell LJ, Zochling J, Boonen A, et al. Anti-TNF-alpha drugs for treating ankylosing spondylitis. *Cochrane Review*. Last updated 18 April 2015. Accessed 6 February 2016. Available at:

http://www.cochrane.org/CD005468/MUSKEL_anti-tnf-alpha-drugs-for-treating-ankylosing-spondylitis.

16. Landewe R, Braun J, Deodhar A, et al. Efficacy of certolizumab pegol on signs and symptoms of axial spondyloarthritis including ankylosing spondylitis: 24-week results of a double-blind randomized placebo-controlled Phase 3 study. *Ann Rheum Dis.* 2014; 73(1): 39-47.
17. Van der Heijde D, Ramiro S, Landewé R, et al 2016 update of the ASAS-EULAR management recommendations for axial spondyloarthritis. *Annals of the Rheumatic Diseases.* 2017;76:978-991.
18. Kay et al. Consensus-based recommendations for the use of biosimilars to treat rheumatological diseases. *Ann Rheum Dis.* 2018;77:165-174.
19. Tanaka Y, Yamanaka H, Takeuchi T, Inoue M, Saito K, Saeki Y, et al. Safety and efficacy of CT-P13 in Japanese patients with rheumatoid arthritis in an extension phase or after switching from infliximab. *Modern Rheumatol.* 2017;27:237-45.
20. Park W, Yoo DH, Miranda P, Brzosko M, Wiland P, Gutierrez-Urena S, et al. Efficacy and safety of switching from reference infliximab to CT-P13 compared with maintenance of CT-P13 in ankylosing spondylitis: 102-week data from the PLANETAS extension study. *Ann Rheum Dis.* 2017;76:346-54.
21. Jorgensen KK, Olsen IC, Goll GL, Lorentzen M, Bolstad N, Haavardsholm EA, et al. Switching from originator infliximab to biosimilar CT-P13 compared with maintained treatment with originator infliximab (NOR-SWITCH): a 52-week, randomised, double-blind, non-inferiority trial. *Lancet.* 2017;389:2304-16.
22. Yoo DH, Prodanovic N, Jaworski J, Miranda P, Ramiterre E, Lanzon A, et al. Efficacy and safety of CT-P13 (biosimilar infliximab) in patients with rheumatoid arthritis: comparison between switching from reference infliximab to CT-P13 and continuing CT-P13 in the PLANETRA extension study. *Ann Rheum Dis.* 2017;76:355-63.
23. Bridges, S. L., White, D. W., Worthing, A. B., Gravallese, E. M., O'Dell, J. R., Nola, K., Kay, J., Cohen, S. B. and on behalf of the American College of Rheumatology (2018), The Science Behind Biosimilars. *Arthritis Rheumatol.* doi:10.1002/art.40388
24. Taltz ® [package insert]. Indianapolis, IN: Eli Lilly and Company. 2020.
25. Mease P, Walsh JA, Baraliakos X, et al. Translating Improvements with Ixekizumab in Clinical Trial Outcomes into Clinical Practice: ASAS40, Pain, Fatigue, and Sleep in Ankylosing Spondylitis. *Rheumatol Ther.* 2019;6(3):435-450. doi:10.1007/s40744-019-0165-3
26. Dougados M, Wei JC, Landewé , et al. Efficacy and safety of ixekizumab through 52 weeks in two phase 3, randomised, controlled clinical trials in patients with active radiographic axial spondyloarthritis (COASTV and COAST-W). *Annals of the Rheumatic Diseases.* 2020;79:176-185.
27. Deodhar, A., Chakravarty, S.D., Cameron, C. et al. A systematic review and network meta-analysis of current and investigational treatments for active ankylosing spondylitis. *Clin Rheumatol* (2020). <https://doi.org/10.1007/s10067-020-04970-3>
28. Ward MM, Deodhar A, Gensler LS, et al. 2019 Update of the American College of Rheumatology/Spondylitis Association of America/Spondyloarthritis Research and Treatment Network Recommendations for the Treatment of Ankylosing Spondylitis and Nonradiographic Axial Spondyloarthritis. *Arthritis Rheumatol.* 2019;71(10):1599-1613.
29. Götestam Skorpen C, Hoeltzenbein M, Tincani A, et al. The EULAR points to consider for use of antirheumatic drugs before pregnancy, and during pregnancy and lactation. *Ann Rheum Dis.* 2016;75(5):795-810. doi:10.1136/annrheumdis-2015-208840.
30. Sammaritano LR, Bermas BL, Chakravarty EE, et al. 2020 American College of Rheumatology Guideline for the Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases. *Arthritis Rheumatol.* 2020;72(4):529-556. doi:10.1002/art.41191.

31. Porter ML, Lockwood SJ, Kimball AB. Update on biologic safety for patients with psoriasis during pregnancy. *Int J Womens Dermatol.* 2017;3(1):21-25. Published 2017 Feb 4. doi:10.1016/j.ijwd.2016.12.003.
32. Ferreira C, Azevedo A, Nogueira M, Torres T. Management of psoriasis in pregnancy - a review of the evidence to date. *Drugs Context.* 2020;9:2019-11-6. Published 2020 Mar 9. doi:10.7573/dic.2019-11-6.
33. Romanowska-Próchnicka K, Felis-Giemza A, Olesińska M, Wojdasiewicz P, Paradowska-Gorycka A, Szukiewicz D. The Role of TNF-α and Anti-TNF-α Agents during Preconception, Pregnancy, and Breastfeeding. *Int J Mol Sci.* 2021;22(6):2922. Published 2021 Mar 13. doi:10.3390/ijms22062922.
34. Krause ML, Amin S, Makol A. Use of DMARDs and biologics during pregnancy and lactation in rheumatoid arthritis: what the rheumatologist needs to know. *Ther Adv Musculoskeletal Dis.* 2014;6(5):169-184. doi:10.1177/1759720X14551568.
35. ACOG Committee Opinion No. 776: Immune Modulating Therapies in Pregnancy and Lactation. *Obstet Gynecol.* 2019;133(4):e287-e295. doi:10.1097/AOG.0000000000003176
36. Humira (adalimumab) [package insert]. North Chicago, IL: Abbott Laboratories; 2021.
37. Cimzia (certolizumab pegol) [package insert]. Smyrna, GA: UCB, Inc; 2019.
38. Menter A, Gelfand JM, Connor C, et al. Joint American Academy of Dermatology-National Psoriasis Foundation guidelines of care for the management of psoriasis with systemic nonbiologic therapies. *J Am Acad Dermatol.* 2020;82(6):1445-1486. doi:10.1016/j.jaad.2020.02.044.

REVIEW & EDIT HISTORY

Document Changes	Reference	Date	P&T Chairman
Creation of Policy	Biological Response Modifiers Review 2-19-08.doc	2/2008	Allen Shek, PharmD
Updated Policy	Biologic Response Modifiers 2010 final.docx	5/2010	Allen Shek, PharmD
Updated Policy	TNF MUE summary 2-21-2012.docx	2/2012	Allen Shek, PharmD
Updated Policy	Psoriatic Arthritis & Ankylosing Spondylitis.docx	10/2014	Jonathan Szkotak, PharmD
Updated Policy	Class Review- Biologics, Apremilast, and Tofacitinib in Inflammatory Joint, Skin, and Bowel Diseases.docx	2/2016	Johnathan Yeh, PharmD
Updated Policy	Class Review- Biologics, Apremilast, and Tofacitinib in Inflammatory Joint, Skin, and Bowel Diseases.docx	02/2017	Johnathan Yeh, PharmD
Updated Policy	HPSJ Coverage Policy – Rheumatology – Ankylosing Spondylitis 2018-02.docx	02/2018	Johnathan,Yeh, PharmD
Updated Policy	HPSJ Coverage Policy – Rheum & Immuno – Ankylosing Spondylitis 2019-05.docx	05/2019	Matthew Garrett, PharmD

Updated Policy	Ankylosing Spondylitis.docx	05/2020	Matthew Garrett, PharmD
Updated Policy	Ankylosing Spondylitis.docx	05/2021	Matthew Garrett, PharmD
Updated Policy	Ankylosing Spondylitis.docx	11/2022	Matthew Garrett, PharmD
Updated Policy	Ankylosing Spondylitis.docx	6/2023	Matthew Garrett, PharmD

Note: All changes are approved by the HPSJ/MVHP P&T Committee before incorporation into the utilization policy.