



MASSACHUSETTS

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Medical Policy Anti-CCP Testing for Rheumatoid Arthritis

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Policy Number: 142

BCBSA Reference Number: 2.01.78

Related Policies

None

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Measurement of anti-CCP, when used as part of the diagnostic workup for rheumatoid arthritis, may be considered **MEDICALLY NECESSARY**.

Measurement of anti-CCP, when used to monitor disease activity and/or treatment response, is **INVESTIGATIONAL**.

Prior Authorization Information

Pre-service approval is required for all inpatient services for all products.

See below for situations where prior authorization may be required or may not be required for outpatient services.

Yes indicates that prior authorization is required.

No indicates that prior authorization is not required.

N/A indicates that this service is primarily performed in an inpatient setting.

	Outpatient
Commercial Managed Care (HMO and POS)	No
Commercial PPO and Indemnity	No
Medicare HMO BlueSM	No
Medicare PPO BlueSM	No

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above medical necessity criteria **MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

CPT codes

CPT codes:	Code Description
86200	Cyclic citrullinated peptide (CCP), antibody

Description

Autoantibodies directed against cyclic citrullinated proteins (anti-CCP) are found in many patients with rheumatoid arthritis (RA). In patients with RA and active joint inflammation, levels of anti-CCP are higher in the synovial fluid than in the peripheral circulation. Anti-CCP found in the serum is thought to be a result of diffusion of these antibodies from the synovial fluid into the general circulation.

Autoantibodies against CCP have been recognized and measured for several decades.. However, older tests were performed by a cumbersome immunofluorescence assay and were not commonly used in routine clinical practice. Therefore, attention turned toward measuring anti-CCP antibodies. Serum anti-CCP levels are currently measured using an ELISA assay.

Examples of anti-CCP testing for RA include the QUANTA Lite™ CCP IgG ELISA from INOVA Diagnostics and the Diastat™ anti-CCP ELISA test from Axis-Shield Diagnostics All anti-CCP tests for RA are considered investigational regardless of the commercial name, the manufacturer or FDA approval status except when used for the medically necessary indications that are consistent with the policy statement.

Summary

Extensive evidence has established that anti-CCP has a moderately high sensitivity, a high specificity, and is a strong predictor of future erosive arthritis. The test is useful in confirming the diagnosis of RA in patients with early disease, especially when the criteria for a diagnosis of RA are not met by other clinical or laboratory measures. Early identification of patients with RA is important since timely treatment with DMARDs can prevent progression of destructive arthritis and improve functional status. The extensive evidence of the usefulness of the test for diagnosing RA supports its medically necessary designation.

The evidence suggests that anti-CCP is not useful as a measure of disease activity and/or response to treatment. As a result, the use of anti-CCP is considered investigational for monitoring disease activity in RA.

Policy History

Date	Action
11/2015	Clarified coding information.
6/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
11/2011-	Medical policy ICD 10 remediation: Formatting, editing and coding updates.

4/2012	No changes to policy statements.
6/2011	Reviewed - Medical Policy Group – Orthopedics, Rehabilitation Medicine and Rheumatology. No changes to policy statements.
7/2010	Reviewed - Medical Policy Group – Orthopedics, Rehabilitation Medicine and Rheumatology.No changes to policy statements.
11/01/09	Medical Policy 142 effective 11/01/09 created.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

References

1. Arnett FC, Edworthy SM, Bloch DA et al. The American Rheumatism Association 1987 revised criteria for the classification of rheumatoid arthritis. *Arthritis Rheum* 1988; 31(3):315-24.
2. Kaarela K, Kauppi MJ, Lehtinen KE. The value of the ACR 1987 criteria in very early rheumatoid arthritis. *Scand J Rheumatol* 1995; 24(5):279-81.
3. Saraux A, Berthelot JM, Chales G et al. Ability of the American College of Rheumatology 1987 criteria to predict rheumatoid arthritis in patients with early arthritis and classification of these patients two years later. *Arthritis Rheum* 2001; 44(11):2485-91.
4. Visser H, le Cessie S, Vos K et al. How to diagnose rheumatoid arthritis early: a prediction model for persistent (erosive) arthritis. *Arthritis Rheum* 2002; 46(2):357-65.
5. Aletaha D, Neogi T, Silman AJ et al. 2010 rheumatoid arthritis classification criteria: an American College of Rheumatology/European League Against Rheumatism collaborative initiative. *Ann Rheum Dis* 2010; 69(9):1580-8.
6. Guidelines for the management of rheumatoid arthritis: 2002 Update. *Arthritis Rheum* 2002; 46(2):328-46.
7. Whiting PF, Smidt N, Sterne JA et al. Systematic review: accuracy of anti-citrullinated Peptide antibodies for diagnosing rheumatoid arthritis. *Ann Intern Med* 2010; 152(7):456-64; W155-66.
8. Avouac J, Gossec L, Dougados M. Diagnostic and predictive value of anti-cyclic citrullinated protein antibodies in rheumatoid arthritis: a systematic literature review. *Ann Rheum Dis* 2006; 65(7):845-51.
9. Qin X, Deng Y, Xu J et al. Meta-analysis: diagnostic value of serum anti-mutated citrullinated vimentin antibodies in patients with rheumatoid arthritis. *Rheumatol Int* 2011; 31(6):785-94.
10. Syversen SW, Gaarder PI, Goll GL et al. High anti-cyclic citrullinated peptide levels and an algorithm of four variables predict radiographic progression in patients with rheumatoid arthritis: results from a 10-year longitudinal study. *Ann Rheum Dis* 2008; 67(2):212-7.
11. Bukhari M, Thomson W, Naseem H et al. The performance of anti-cyclic citrullinated peptide antibodies in predicting the severity of radiologic damage in inflammatory polyarthritis: results from the Norfolk Arthritis Register. *Arthritis Rheum* 2007; 56(9):2929-35.
12. Yamane T, Hashiramoto A, Tanaka Y et al. Easy and accurate diagnosis of rheumatoid arthritis using anti-cyclic citrullinated peptide 2 antibody, swollen joint count, and C-reactive protein/rheumatoid factor. *J Rheumatol* 2008; 35(3):414-20.
13. Wagner E, Skoumal M, Bayer PM et al. Antibody against mutated citrullinated vimentin: a new sensitive marker in the diagnosis of rheumatoid arthritis. *Rheumatol Int* 2009; 29(11):1315-21.
14. Shidara K, Inoue E, Tanaka E et al. Comparison of the second and third generation anti-cyclic citrullinated peptide antibody assays in the diagnosis of Japanese patients with rheumatoid arthritis. *Rheumatol Int* 2011; 31(5):617-22.
15. Ryu HJ, Takeuchi F, Kuwata S et al. The diagnostic utilities of anti-agalactosyl IgG antibodies, anti-cyclic citrullinated peptide antibodies, and rheumatoid factors in rheumatoid arthritis. *Rheumatol Int* 2011; 31(3):315-9.

16. Hwang SM, Kim JO, Yoo YM et al. Performance analysis of the ARCHITECT anti-cyclic citrullinated peptide antibody in the diagnosis of rheumatoid arthritis. *Clin Chem Lab Med* 2010; 48(2):225-30.
17. Bongi SM, Manetti R, Melchiorre D et al. Anti-cyclic citrullinated peptide antibodies are highly associated with severe bone lesions in rheumatoid arthritis anti-CCP and bone damage in RA. *Autoimmunity* 2004; 37(6-7):495-501.
18. Raza K, Breese M, Nightingale P et al. Predictive value of antibodies to cyclic citrullinated peptide in patients with very early inflammatory arthritis. *J Rheumatol* 2005; 32(2):231-8.
19. Landmann T, Kehl G, Bergner R. The continuous measurement of anti-CCP-antibodies does not help to evaluate the disease activity in anti-CCP-antibody-positive patients with rheumatoid arthritis. *Clin Rheumatol* 2010; 29(12):1449-53.
20. Zendman AJ, van Venrooij WJ, Pruijn GJ. Use and significance of anti-CCP autoantibodies in rheumatoid arthritis. *Rheumatology (Oxford)* 2006; 45(1):20-5.
21. Ronnelid J, Wick MC, Lampa J et al. Longitudinal analysis of citrullinated protein/peptide antibodies (anti-CP) during 5 year follow up in early rheumatoid arthritis: anti-CP status predicts worse disease activity and greater radiological progression. *Ann Rheum Dis* 2005; 64(12):1744-9.
22. Dejaco C, Duftner C, Klotz W et al. Third generation anti-cyclic citrullinated peptide antibodies do not predict anti-TNF-alpha treatment response in rheumatoid arthritis. *Rheumatol Int* 2010; 30(4):451-4.
23. National Collaborating Centre for Chronic Conditions. Rheumatoid Arthritis: the management of rheumatoid arthritis in adults. National Institute for Health and Clinical Excellence (NICE) 2009; Feb 35p. (NICE clinical guideline no 79).