MASSACHUSETTS

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Medical Policy

Serum Biomarker Panel Testing for Systemic Lupus Erythematosus and Other Connective Tissue Diseases

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Policy Number: 702

BCBSA Reference Number: 2.04.123 (For Plan internal use only)
NCD/LCD: NA

Related Policies

Multibiomarker Disease Activity Blood Test for Rheumatoid Arthritis, #677

Policy

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

Serum biomarker panel testing with proprietary algorithms and/or index scores for the diagnosis of systemic lupus erythematosus and other connective tissue diseases is considered **INVESTIGATIONAL**.

Prior Authorization Information

Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	This is **not** a covered service.
Commercial PPO and Indemnity	This is **not** a covered service.
Medicare HMO Blue℠	This is **not** a covered service.
Medicare PPO Blue℠	This is **not** a covered service.

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 following CPT code is considered investigational for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
0062U	Autoimmune (systemic lupus erythematosus), IgG and IgM analysis of 80 biomarkers, utilizing serum, algorithm reported with a risk score
0312U	Autoimmune diseases (eg, systemic lupus erythematosus [SLE]), analysis of 8 IgG autoantibodies and 2 cell-bound complement activation products using enzyme-linked immunosorbent immunoassay (ELISA), flow cytometry and indirect immunofluorescence, serum, or plasma and whole blood, individual components reported along with an algorithmic SLE-likelihood assessment

Description

Connective Tissue Diseases

Systemic Lupus Erythematosus

Systemic lupus erythematous (SLE) is an autoimmune connective tissue disease (CTD). It is one of several types of lupus, the others being cutaneous and drug-induced. About 90% of lupus patients are women between the ages of 15 and 44 years. Systemic lupus erythematous causes inflammation and can affect any part of the body, most commonly the skin, heart, joints, lungs, blood vessels, liver, kidneys, and nervous system. Although generally not fatal, SLE can increase mortality, most commonly from cardiovascular disease due to accelerated atherosclerosis. Systemic lupus erythematous can also lead to kidney failure, which may reduce survival. The survival rate in the U.S. is approximately 95% at 5 years and 78% at 20 years.[1,] The morbidity associated with SLE is substantial. Symptoms such as joint and muscle pain can impact quality of life and functional status. Systemic lupus erythematous also increases patients' risk of infection, cancer, avascular necrosis (bone death), and pregnancy complications (eg, preeclampsia, preterm birth). The course of the disease is variable, and patients generally experience flares of mild-to-severe illness and remission.

Other Connective Tissue Diseases

Several other connective tissue diseases (CTDs) may require a differential diagnosis from SLE (eg, rheumatoid arthritis, thyroid disease, Sjögren syndrome, antiphospholipid syndrome, and polymyositis).

Rheumatoid arthritis is a chronic inflammatory peripheral polyarthritis. Rheumatoid arthritis can lead to deformity through stretching of tendons and ligaments and destruction of joints through erosion of cartilage and bone. Rheumatoid arthritis can also affect the skin, eyes, lungs, heart, and blood vessels.

Graves disease is an autoimmune disorder that leads to overactivity of the thyroid gland. The disease arises from thyroid-stimulating hormone receptor antibodies. It is the most common cause of hyperthyroidism. Blood tests may show raised thyroid-stimulating immunoglobulin antibodies.

Hashimoto disease, also known as chronic lymphocytic thyroiditis, is an autoimmune disorder and is the most common cause of hypothyroidism second to iodine insufficiency. It is characterized by an underactive thyroid gland and gradual thyroid failure. Diagnosis is confirmed with blood tests for thyroid-stimulating hormone (T4) and antithyroid antibodies.

Sjögren syndrome is an autoimmune disorder characterized by dryness of the eyes and mouth due to diminished lacrimal and salivary gland function. Affected individuals may also have symptoms of fatigue, myalgia, and cognitive dysfunction, which may be difficult to distinguish clinically from fibromyalgia or medication side effects. Typical antibodies include antinuclear antibody (ANA), anti-Sjögren-syndrome-related antigen, anti-Sjögren syndrome type B, or rheumatoid factor.

Antiphospholipid syndrome is a systemic autoimmune disorder characterized by venous or arterial thrombosis and/or pregnancy morbidity. Antiphospholipid antibodies are directed against phospholipid-binding proteins.

Polymyositis and dermatomyositis are inflammatory myopathies characterized by muscle weakness and inflammation. Dermatomyositis may also have skin manifestations

Summary

Systemic lupus erythematosus (SLE) is an autoimmune connective tissue disease (CTD) that can be difficult to diagnose because patients often present with diverse, nonspecific symptoms that overlap with other CTDs; to further complicate matters, commonly used laboratory tests are not highly accurate. Moreover, similar symptoms may also present themselves in patients with fibromyalgia. Currently, differential diagnosis depends on a combination of clinical signs and symptoms and individual laboratory tests. More accurate laboratory tests for SLE and other CTDs could facilitate the diagnosis of the disease. Laboratory-developed, diagnostic panel tests with proprietary algorithms and/or index scores for the diagnosis of SLE and other autoimmune CTDs are commercially available.

For individuals with signs and/or symptoms of SLE who receive serum biomarker panel testing, the evidence includes several diagnostic accuracy studies and 1 prospective evaluation of clinical utility that compared the impact of the test results on physicians' evaluation of patients with a clinical suspicion for SLE. Relevant outcomes are test accuracy, symptoms, and quality of life. One case-control study found high sensitivity and specificity for a commercially available test for diagnosing SLE. More recent evaluations have tested how a panel test can aid in the diagnosis or exclusion of SLE in a population with suspected SLE or undifferentiated findings. Two observational studies found that patients with a positive Avise test were more likely to have classifiable SLE after 9 months to 2 years of follow-up. Additionally, a RCT evaluated the influence of test results from Avise and standard diagnosis laboratory testing on rheumatologists' likelihood of diagnosing SLE, which found that physicians were less likely to diagnose SLE in a patient with a negative Avise test. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals with signs and/or symptoms of CTD (besides SLE) who receive serum biomarker panel testing, more studies are needed. Relevant outcomes are test accuracy, symptoms, and quality of life. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Policy History

Date	Action
8/2022	Annual policy review. Description summary and references updated. Policy statements unchanged.
4/2022	Clarified coding information.
8/2020	Annual policy review. Description, summary and references updated. Policy statements unchanged.
8/2019	Annual policy review. Description, summary and references updated. Policy statements unchanged.
11/2018	Annual policy review. Description and summary clarified.
10/2018	Annual policy review. Clinical criteria in Table 1 for synovitis clarified under the description section. Summary and references updated. Clarified coding information
7/2018	Annual policy review. New references added. Summary clarified.

9/2017	Annual policy review. The phrase “and other connective tissue diseases” added to policy statement and title.
11/2015	Annual policy review. New references added.
1/2015	Annual policy review. New medical policy describing investigational indications. Effective 1/1/2015.

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

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