

C1q Antibody, IgG

Systemic lupus erythematosus (SLE) is an autoimmune disease with multiorgan involvement. Approximately 37-45% of patients with SLE will develop lupus nephritis, which negatively impacts patient survival.¹ Testing for C1q antibodies assists in evaluating the risk of lupus nephritis development.²

Disease Overview

Physiology

C1q antibodies are associated with active glomerulonephritis in patients with SLE.² The presence of antibodies in patients with SLE indicates a higher risk for developing severe clinical manifestations of the disease. Specifically, the presence of C1q antibodies correlates with renal activity and flares, and the absence of antibodies indicates a low probability of lupus nephritis.²

Test Interpretation

Sensitivity/Specificity

- Clinical sensitivity and specificity vary based on disease population and disease state
- Analytical sensitivity and specificity vary based on disease population and disease state as well as testing platform

Results

- Negative: 0-19 units
- Equivocal: 20-39 units
- Positive: ≥40 units

Limitations

- Not all patients with lupus nephritis will be positive for C1q antibodies
- The presence of C1q antibodies is not specific for SLE

References

1. Albuquerque BC, Salles VB, Tajra RDP, et al. [Outcome and Prognosis of Patients With Lupus Nephritis Submitted to Renal Transplantation](#). Sci Rep. 2019;9(1):11611. PubMed
2. Wener MH. [Tests for circulating immune complexes](#). Methods Mol Biol. 2014;1134:47-57. PubMed

Related Information

[Mixed Connective Tissue Disease - MCTD](#)
[Systemic Lupus Erythematosus - SLE](#)

Related Tests

[Antinuclear Antibody \(ANA\) with HEP-2 Substrate, IgG by IFA with Reflex by Pattern 3000601](#)

Tests to Consider

[Anti-C1q Antibody, IgG 2007601](#)

Method: Semi-Quantitative Enzyme-Linked Immunosorbent Assay

- Assess risk for lupus nephritis development in individuals with SLE
- Assess global SLE disease activity

See [Related Tests](#) for other tests for SLE or connective tissue disease

Method: Semi-Quantitative Indirect Fluorescent Antibody/Qualitative Enzyme-Linked Immunosorbent Assay/Semi-Quantitative Enzyme-Linked Immunosorbent Assay/Semi-Quantitative Multiplex Bead Assay/Qualitative Immunoblot



[Antinuclear Antibodies \(ANA\), IgG by ELISA with Reflex to ANA, HEp-2 Substrate, IgG by IFA 0050080](#)

Method: Qualitative Enzyme-Linked Immunosorbent Assay/Semi-Quantitative Indirect Fluorescent Antibody

[Connective Tissue Diseases Profile 0051668](#)

Method: Semi-Quantitative Multiplex Bead Assay

[Antinuclear Antibodies \(ANA\), IgG by ELISA with Reflex to ANA HEp-2 Substrate, IgG by IFA and ENA Confirmation 0050317](#)

Method: Qualitative Enzyme-Linked Immunosorbent Assay/Semi-Quantitative Indirect Fluorescent Antibody/Semi-Quantitative Multiplex Bead Assay

[Double-Stranded DNA \(dsDNA\) Antibody, IgG by ELISA with Reflex to dsDNA Antibody, IgG by IFA 0050215](#)

Method: Qualitative Enzyme-Linked Immunosorbent Assay/Semi-Quantitative Indirect Fluorescent Antibody

[Double-Stranded DNA \(dsDNA\) Antibody, IgG by IFA \(using Crithidia luciliae\) 2002693](#)

Method: Semi-Quantitative Indirect Fluorescent Antibody

[Smith and Smith/RNP \(ENA\) Antibodies, IgG 3000460](#)

Method: Semi-Quantitative Multiplex Bead Assay

[Smith \(ENA\) Antibody, IgG 0050085](#)

Method: Semi-Quantitative Multiplex Bead Assay

[Chromatin Antibody, IgG 2005287](#)

Method: Semi-Quantitative Enzyme-Linked Immunosorbent Assay

[Smith/RNP \(ENA\) Antibody, IgG 0050470](#)

Method: Semi-Quantitative Multiplex Bead Assay

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