

**POLICY:** Inflammatory Conditions – Benlysta® (belimumab intravenous injection – Human Genome Sciences, Inc./GlaxoSmithKline)

**EFFECTIVE DATE:** 1/1/2021

**LAST REVISION DATE:** 07/05/2023

**COVERAGE CRITERIA FOR:** All Aspirus Medicare Plans

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## OVERVIEW

Benlysta intravenous, a B-lymphocyte stimulator (BLyS)-specific inhibitor, is indicated for the following uses:<sup>1</sup>

- **Lupus nephritis**, in patients  $\geq 5$  years of age with active disease who are receiving standard therapy.
- **Systemic lupus erythematosus (SLE)**, in patients  $\geq 5$  years of age with active, autoantibody-positive, systemic disease in those who are receiving standard therapy.

Benlysta intravenous has not been studied and is not recommended in those with severe active central nervous system lupus, or in combination with other biologics.

## Guidelines

Benlysta is addressed in the following guidelines:

- **Lupus Nephritis:** Guidelines for lupus nephritis are available from the European League Against Rheumatism (EULAR) and European Renal Association/European Dialysis and Transplant Association (ERA-EDTA) [2019].<sup>2</sup> Benlysta may be considered as add-on treatment for non-responding/refractory lupus nephritis, to facilitate glucocorticoid sparing, control extra-renal lupus activity, and decrease the risk for extra-renal flares. Guidelines from Kidney Disease: Improving Global Outcomes (KDIGO) [2021] list Benlysta among the therapies recommended for second-line treatment of lupus nephritis.<sup>3</sup> The guidelines note that optimal use of Benlysta will become clearer as its use increases.
- **SLE:** Guidelines from the EULAR (2019) recommend consideration of add-on therapy with Benlysta for patients who have an inadequate response to standard of care (e.g., combinations of hydroxychloroquine and glucocorticoids with or without immunosuppressive agents).<sup>4</sup> EULAR defines an inadequate response as residual disease activity not allowing tapering of glucocorticoids and/or frequent relapses.

## POLICY STATEMENT

Prior Authorization is recommended for medical benefit coverage of Benlysta intravenous. Approval is recommended for those who meet the **Criteria** and **Dosing** for the listed indications. Extended approvals are allowed if the patient continues to meet the Criteria and Dosing. Requests for doses outside of the established dosing documented in this policy will be considered on a case-by-case basis by a clinician (i.e., Medical Director or Pharmacist). All approvals are provided for the duration noted below. In cases where the approval is authorized in months, 1 month is equal to 30 days. Because of the specialized skills required for evaluation and diagnosis of patients treated with Benlysta intravenous as well as the monitoring required for adverse events and long-term efficacy, approval requires Benlysta intravenous to be prescribed by or in consultation with a physician who specializes in the condition being treated.

**Automation:** None.

**RECOMMENDED AUTHORIZATION CRITERIA**

Coverage of Benlysta intravenous is recommended in those who meet one of the following:

**FDA-Approved Indications**

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- 1. Lupus Nephritis.** Approve for the duration noted if the patient meets ONE of the following (A or B):
- A) Initial Therapy.** Approve for 6 months if the patient meets ALL of the following (i, ii, iii, and iv):
- a. Patient is  $\geq 5$  years of age; AND
  - b. Diagnosis of lupus nephritis has been confirmed on biopsy; AND  
Note: For example, World Health Organization class III, IV, or V lupus nephritis.
  - c. The medication is being used concurrently with an immunosuppressive regimen; AND  
Note: Examples of an immunosuppressive regimen include azathioprine, cyclophosphamide, leflunomide, methotrexate, mycophenolate mofetil, and/or a systemic corticosteroid.
  - d. The medication is prescribed by or in consultation with a nephrologist or rheumatologist.
- B) Patient is Currently Receiving Benlysta Intravenous or Subcutaneous.** Approve for 1 year if the patient meets ALL of the following (i, ii, and iii):
- i. The medication is being used concurrently with an immunosuppressive regimen; AND  
Note: Examples of an immunosuppressive regimen include azathioprine, cyclophosphamide, leflunomide, methotrexate, mycophenolate mofetil, and/or a systemic corticosteroid.
  - ii. The medication is prescribed by or in consultation with a nephrologist or rheumatologist.; AND
  - iii. Patient has responded to Benlysta subcutaneous or intravenous, as determined by the prescriber.  
Note: Examples of a response include improvement in organ dysfunction, reduction in flares, reduction in corticosteroid dose, decrease of anti-dsDNA titer, and improvement in complement levels (i.e., C3, C4).

**Dosing.** Approve the following dosing regimen (A and B):

- A) The dose is up to 10 mg/kg given as an intravenous infusion; AND
- B) Doses are administered at Weeks 0, 2, and 4, with subsequent doses separated by at least 4 weeks.

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- 2. Systemic Lupus Erythematosus.** Approve for the duration noted if the patient meets ONE of the following (A or B):
- A) Initial Therapy.** Approve for 4 months if the patient meets ALL of the following (i, ii, iii, and iv):
- i. Patient is  $\geq 5$  years of age; AND
  - ii. Patient has autoantibody-positive systemic lupus erythematosus (SLE), defined as positive for antinuclear antibodies (ANA) and/or anti-double-stranded DNA (anti-dsDNA) antibody; AND  
Note: Not all patients with SLE are positive for anti-dsDNA, but most will be positive for ANA.
  - iii. Patient meets ONE of the following (a or b):
    - a) The medication is being used concurrently with at least one other standard therapy; OR  
Note: Examples of standard therapies include an antimalarial (e.g., hydroxychloroquine), systemic corticosteroid (e.g., prednisone), and other immunosuppressants (e.g., azathioprine, mycophenolate mofetil, methotrexate).
    - b) Patient is determined to be intolerant to standard therapy due to a significant toxicity, as determined by the prescriber; AND
  - iv. The medication is prescribed by or in consultation with a rheumatologist, clinical immunologist, nephrologist, neurologist, or dermatologist.

- B) Patient is Currently Receiving Benlysta Intravenous or Subcutaneous.** Approve for 1 year if the patient meets ALL of the following (i, ii, and iii):
- i.** Patient meets ONE of the following (a or b):
    - a)** The medication is being used concurrently with at least one other standard therapy; OR  
Note: Examples of standard therapies include an antimalarial (e.g., hydroxychloroquine), systemic corticosteroid (e.g., prednisone), and other immunosuppressants (e.g., azathioprine, mycophenolate mofetil, methotrexate).
    - b)** Patient is determined to be intolerant to standard therapy due to a significant toxicity, as determined by the prescriber; AND
  - ii.** The medication is prescribed by or in consultation with a rheumatologist, clinical immunologist, nephrologist, neurologist, or dermatologist; AND
  - iii.** Patient has responded to Benlysta subcutaneous or intravenous, as determined by the prescriber.  
Note: Examples of a response include reduction in flares, reduction in corticosteroid dose, decrease of anti-dsDNA titer, improvement in complement levels (i.e., C3, C4), or improvement in specific organ dysfunction (e.g., musculoskeletal, blood, hematologic, vascular, others).

**Dosing.** Approve the following dosing regimen (A and B):

**A)** The dose is up to 10 mg/kg given as an intravenous infusion; AND

**B)** Doses are administered at Weeks 0, 2, and 4, with subsequent doses separated by at least 4 weeks.

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#### CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Benlysta intravenous is not recommended in the following situations:

- 1. Concurrent Use with Other Biologics.** Benlysta intravenous has not been studied and is not recommended in combination with other biologics.<sup>1</sup> Safety and efficacy have not been established with these combinations. See [APPENDIX](#) for examples of other biologics that should not be taken in combination with Benlysta.
- 2. Concurrent Use with Lupkynis (voclosporin capsules).** Lupkynis has not been studied in combination with biologics such as Benlysta.<sup>1</sup>
- 3. Rheumatoid Arthritis.** A Phase II dose-ranging study evaluating patients with rheumatoid arthritis showed only small American College of Rheumatology (ACR) 20 responses with Benlysta (e.g., ACR 20 response at Week 24 was 28% with Benlysta 10 mg/kg).<sup>5</sup> Numerous other agents are available with higher ACR responses and established efficacy for RA.
- 4.** Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

**REFERENCES**

1. Benlysta® injection [prescribing information]. Durham, NC: GlaxoSmithKline; February 2023.
2. Hahn BH, McMahon MA, Wilkinson A, et al. American College of Rheumatology guidelines for screening, treatment, and management of lupus nephritis. *Arthritis Care Res (Hoboken)*. 2012;64(6):797-808.
3. Rovin BH, Adler SG, Barratt J, et al. Executive summary of the KDIGO 2021 guideline for the management of glomerular diseases. *Kidney Int*. 2021;100(4):753-779.
4. Fanouriakis A, Kostopoulou M, Alunno A, et al. 2019 update of the EULAR recommendations for the management of systemic lupus erythematosus. *Ann Rheum Dis*. 2019;78(6):736-745.
5. Stohl W, Merrill JT, McKay JD, et al. Efficacy and safety of belimumab in patients with rheumatoid arthritis: a phase II, randomized, double-blind, placebo-controlled, dose-ranging study. *J Rheumatol*. 2013;40(5):579-589.

**HISTORY**

Type of Revision	Summary of Changes	Review Date
Annual Revision	<b>Conditions Not Recommended for Approval:</b> Concurrent use with Lupkynis (voclosporin capsules) was added as a condition not recommended for approval.	02/09/2022
Selected Revision	<b>Lupus Nephritis:</b> To align with the updated labeling, the age of approval was changed from ≥ 18 years of age to ≥ 5 years of age.	08/24/2022
Annual Revision	No criteria changes.	03/08/2023
Selected Revision	<b>Lupus Nephritis:</b> For initial therapy, a requirement was added that the patient has biopsy-confirmed lupus nephritis. For initial therapy and a patient currently receiving Benlysta, the requirement that the patient is taking with standard therapy was changed to more generally require that the patient is taking an immunosuppressive regimen. Leflunomide, methotrexate, and/or systemic corticosteroids were added to existing concurrent medication examples. The exception for a patient who is intolerant to standard therapy due to significant toxicity as determined by the prescriber was removed from the policy.	04/26/2023
Selected Revision	<b>Lupus Nephritis:</b> For initial therapy, the requirement that the “Patient has autoantibody-positive systemic lupus erythematosus (SLE), defined as positive for antinuclear antibodies (ANA) and/or anti-double-stranded DNA (anti-dsDNA) antibody” was removed from the policy.	07/05/2023

**APPENDIX**

	<b>Mechanism of Action</b>	<b>Examples of Inflammatory Indications*</b>
<b>Biologics</b>		
<b>Benlysta</b> <sup>®</sup> (belimumab SC injection, IV infusion)	BLYS inhibitor	SLE, lupus nephritis
<b>Saphnelo</b> <sup>™</sup> (anifrolumab-fnia IV infusion)	IFN receptor antagonist	SLE
<b>Adalimumab SC Products</b> (Humira <sup>®</sup> , biosimilars)	Inhibition of TNF	AS, CD, JIA, PsO, PsA, RA, UC
<b>Cimzia</b> <sup>®</sup> (certolizumab pegol SC injection)	Inhibition of TNF	AS, CD, nr-axSpA, PsO, PsA, RA
<b>Etanercept SC Products</b> (Enbrel <sup>®</sup> , biosimilars)	Inhibition of TNF	AS, JIA, PsO, PsA
<b>Infliximab IV Products</b> (Remicade <sup>®</sup> , biosimilars)	Inhibition of TNF	AS, CD, PsO, PsA, RA, UC
<b>Simponi</b> <sup>®</sup> , <b>Simponi</b> <sup>®</sup> <b>Aria</b> <sup>™</sup> (golimumab SC injection, golimumab IV infusion)	Inhibition of TNF	SC formulation: AS, PsA, RA, UC
		IV formulation: AS, PJIA, PsA, RA
<b>Actemra</b> <sup>®</sup> (tocilizumab IV infusion, tocilizumab SC injection)	Inhibition of IL-6	SC formulation: PJIA, RA, SJIA
		IV formulation: PJIA, RA, SJIA
<b>Kevzara</b> <sup>®</sup> (sarilumab SC injection)	Inhibition of IL-6	RA
<b>Orencia</b> <sup>®</sup> (abatacept IV infusion, abatacept SC injection)	T-cell costimulation modulator	SC formulation: JIA, PsA, RA
		IV formulation: JIA, PsA, RA
<b>Rituximab IV Products</b> (Rituxan <sup>®</sup> , biosimilars)	CD20-directed cytolytic antibody	RA
<b>Kineret</b> <sup>®</sup> (anakinra SC injection)	Inhibition of IL-1	JIA <sup>^</sup> , RA
<b>Stelara</b> <sup>®</sup> (ustekinumab SC injection, ustekinumab IV infusion)	Inhibition of IL-12/23	SC formulation: CD, PsO, PsA, UC
		IV formulation: CD, UC
<b>Siliq</b> <sup>™</sup> (brodalumab SC injection)	Inhibition of IL-17	PsO
<b>Cosentyx</b> <sup>®</sup> (secukinumab SC injection)	Inhibition of IL-17A	AS, ERA, nr-axSpA, PsO, PsA
<b>Taltz</b> <sup>®</sup> (ixekizumab SC injection)	Inhibition of IL-17A	AS, nr-axSpA, PsO, PsA
<b>Ilumya</b> <sup>™</sup> (tildrakizumab-asmn SC injection)	Inhibition of IL-23	PsO
<b>Skyrizi</b> <sup>®</sup> (risankizumab-rzaa SC injection)	Inhibition of IL-23	PsA, PsO
<b>Tremfya</b> <sup>™</sup> (guselkumab SC injection)	Inhibition of IL-23	PsO
<b>Entyvio</b> <sup>™</sup> (vedolizumab IV infusion)	Integrin receptor antagonist	CD, UC

\* Not an all-inclusive list of indication (e.g., oncology indications and rare inflammatory conditions are not listed). Refer to the prescribing information for the respective agent for FDA-approved indications; SC – Subcutaneous; IV – Intravenous; BLYS – B-lymphocyte stimulator-specific inhibitor; SLE – Systemic lupus erythematosus; IFN – Interferon; TNF – Tumor necrosis factor; AS – Ankylosing spondylitis; CD – Crohn’s disease; JIA – Juvenile idiopathic arthritis; PsO – Plaque psoriasis; PsA – Psoriatic arthritis; RA – Rheumatoid arthritis; UC – Ulcerative colitis; nr-axSpA – Non-radiographic axial spondyloarthritis; PJIA – Polyarticular juvenile idiopathic arthritis; IL – Interleukin; SJIA – Systemic juvenile idiopathic arthritis; <sup>^</sup> Off-label use of Kineret in JIA supported in guidelines; ERA – Enthesitis-related arthritis.