

SPECIALTY GUIDELINE MANAGEMENT

Intravenous Immune Globulin (IVIG):

Bivigam[®], Carimune[®] NF, Flebogamma[®] DIF, Gammagard[®] Liquid, Gammagard[®] S/D, Gammaked™, Gammaplex[®], Gamunex[®]-C, Octagam[®], and Privigen[®]

POLICY

I. INDICATIONS

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

A. FDA-Approved Indications

1. Primary immunodeficiency
2. Idiopathic thrombocytopenic purpura (ITP)
3. Chronic inflammatory demyelinating polyneuropathy
4. Multifocal motor neuropathy
5. Kawasaki syndrome
6. B-cell chronic lymphocytic leukemia (CLL)

B. Compendial Uses

1. Prophylaxis of bacterial infections in pediatric human immunodeficiency virus (HIV) infection
2. Prophylaxis of bacterial infections in bone marrow transplant (BMT)/hematopoietic stem cell transplant (HSCT) recipients
3. Dermatomyositis
4. Polymyositis
5. Myasthenia gravis
6. Guillain-Barre syndrome
7. Lambert-Eaton myasthenic syndrome
8. Fetal/neonatal alloimmune thrombocytopenia
9. Parvovirus B19-induced pure red cell aplasia
10. Stiff-person syndrome

All other indications are considered experimental/investigational and are not a covered benefit.

II. REQUIRED DOCUMENTATION

The following information is necessary to initiate the prior authorization review:

- A. Primary immunodeficiency
 1. Diagnostic test results (when applicable)
 - a. Copy of laboratory report with serum immunoglobulin levels: IgG, IgA, IgM, and IgG subclasses
 - b. Vaccine response to pneumococcal polysaccharide vaccine (post-vaccination *Streptococcus pneumoniae* antibody titers)
 - c. Pertinent genetic or molecular testing in members with a known genetic disorder
 - d. Copy of laboratory report with lymphocyte subset enumeration by flow cytometry
 2. IgG trough level for those continuing with IVIG therapy
- B. Secondary hypogammaglobulinemia (CLL, HIV, BMT/HSCT recipients)
 1. Copy of laboratory report with pre-treatment serum IgG level (when applicable)

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- C. Chronic inflammatory demyelinating polyneuropathy (CIDP) and multifocal motor neuropathy (MMN)
 - 1. Pre-treatment electrodiagnostic studies (electromyography [EMG] or nerve conduction studies [NCS])
 - 2. For CIDP, pre-treatment cerebrospinal fluid (CSF) analysis (when available)
- D. Dermatomyositis and polymyositis
 - 1. Pre-treatment electrodiagnostic studies (EMG/NCS)
 - 2. Pre-treatment muscle biopsy report (when available)
- E. Idiopathic thrombocytopenic purpura (immune thrombocytopenia)
 - 1. Laboratory report with pre-treatment platelet count

III. CRITERIA FOR INITIAL APPROVAL

A. Primary Immunodeficiency

Initial authorization of 12 months may be granted for members with any of the following diagnoses:

1. Severe combined immunodeficiency (SCID) or congenital agammaglobulinemia (eg, X-linked or autosomal recessive agammaglobulinemia):
 - a. Diagnosis confirmed by genetic or molecular testing, or
 - b. Pretreatment IgG level < 200 mg/dL, or
 - c. Absence or very low number of T cells (CD3 T cells < 300/microliter) or the presence of maternal T cells in the circulation (SCID only)
2. Wiskott-Aldrich syndrome, DiGeorge syndrome, or ataxia-telangiectasia (or other non-SCID combined immunodeficiency):
 - a. Diagnosis confirmed by genetic or molecular testing (if applicable), and
 - b. History of recurrent bacterial infections (eg, pneumonia, otitis media, sinusitis, sepsis, gastrointestinal), and
 - c. Impaired antibody response to pneumococcal polysaccharide vaccine (see Appendix A)
3. Common variable immunodeficiency (CVID):
 - a. Age 4 years or older
 - b. Other causes of immune deficiency have been excluded (eg, drug induced, genetic disorders, infectious diseases such as HIV, malignancy)
 - c. Pretreatment IgG level < 500 mg/dL or ≥ 2 SD below the mean for age
 - d. History of recurrent bacterial infections
 - e. Impaired antibody response to pneumococcal polysaccharide vaccine (see Appendix A)
4. Hypogammaglobulinemia (unspecified), IgG subclass deficiency, selective IgA deficiency, selective IgM deficiency, or specific antibody deficiency:
 - a. History of recurrent bacterial infections
 - b. Impaired antibody response to pneumococcal polysaccharide vaccine (see Appendix A)
 - c. Any of the following pre-treatment laboratory findings:
 - i. Hypogammaglobulinemia: IgG < 500 mg/dL or ≥ 2 SD below the mean for age
 - ii. Selective IgA deficiency: IgA level < 7 mg/dL with normal IgG and IgM levels
 - iii. Selective IgM deficiency: IgM level < 30 mg/dL with normal IgG and IgA levels
 - iv. IgG subclass deficiency: IgG1, IgG2, or IgG3 ≥ 2 SD below mean for age assessed on at least 2 occasions; normal IgG (total) and IgM levels, normal/low IgA levels
 - v. Specific antibody deficiency: normal IgG, IgA and IgM levels
5. Other predominant antibody deficiency disorders must meet a., b., and c.i. in section 4. above.
6. Other combined immunodeficiency must meet criteria in section 2. above.

Re-authorization of 12 months may be granted when the following criteria are met:

1. A reduction in the frequency of bacterial infections has been demonstrated since initiation of IVIG therapy, AND
2. IgG trough levels are monitored at least yearly and maintained at or above the lower range of normal for age (when applicable for indication), OR
3. The prescriber will re-evaluate the dose of IVIG and consider a dose adjustment (when appropriate).

Gammagard Liquid, Gamunex-C, and Gammaked may be administered intravenously or subcutaneously for primary immunodeficiency.

B. B-cell Chronic Lymphocytic Leukemia (CLL)

1. Initial authorization of 6 months may be granted when the following criteria are met:
 - a. IVIG is prescribed for prophylaxis of bacterial infections.
 - b. Member has a history of recurrent sinopulmonary infections requiring intravenous antibiotics or hospitalization.
 - c. Member has a pretreatment serum IgG level <500 mg/dL.
2. Re-authorization of 6 months may be granted when the following criterion is met:
 - a. A reduction in the frequency of bacterial infections has been demonstrated since initiation of IVIG therapy.

C. Prophylaxis of Bacterial Infections in HIV-Infected Pediatric Patients

1. Initial authorization of 6 months may be granted to pediatric members with HIV infection when the following criteria are met:
 - a. Member is \leq 12 years of age.
 - b. IVIG is prescribed for primary prophylaxis of bacterial infections and pretreatment serum IgG < 400 mg/dL, or
 - c. IVIG is prescribed for secondary prophylaxis of bacterial infections
 - i. History of recurrent bacterial infections (> 2 serious bacterial infections in a 1-year period)
 - ii. Member is not able to take combination antiretroviral therapy.
 - iii. Antibiotic prophylaxis was tried but was not effective (eg, trimethoprim-sulfamethoxazole).
2. Re-authorization of 6 months may be granted when the following criterion is met:
 - a. A reduction in the frequency of bacterial infections has been demonstrated since initiation of IVIG therapy.

D. Prophylaxis of Bacterial Infections in BMT/HSCT Recipients

1. Initial authorization of 6 months may be granted to members who are BMT/HSCT recipients when the following criteria are met:
 - a. IVIG is prescribed for prophylaxis of bacterial infections.
 - b. Either of the following:
 - i. IVIG is requested within the first 100 days post-transplant.
 - ii. Member has a pretreatment serum IgG < 400 mg/dL.
2. Re-authorization of 6 months may be granted when the following criterion is met:
 - a. A reduction in the frequency of bacterial infections has been demonstrated since initiation of IVIG therapy.

E. Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)

1. Initial authorization of 3 months may be granted when the following criteria are met:
 - a. Moderate to severe functional disability
 - b. Electrodiagnostic studies are consistent with multifocal demyelinating abnormalities
 - c. Elevated CSF protein (when available)
2. Re-authorization of 12 months may be granted when the following criteria are met:
 - a. Significant improvement in disability and maintenance of improvement since initiation of IVIG therapy
 - b. In those who are clinically stable and receiving long-term treatment (ie, more than 1 year), the dose has been tapered and/or treatment withdrawn to determine whether continued treatment is necessary
 - c. IVIG is being used at the lowest effective dose and frequency

F. Multifocal Motor Neuropathy (MMN)

1. Initial authorization of 3 months may be granted when the following criteria are met:
 - a. Weakness without objective sensory loss in 2 or more nerves
 - b. Electrodiagnostic studies are consistent with motor conduction block
 - c. Normal sensory nerve conduction studies
2. Re-authorization of 12 months may be granted when the following criterion is met:
 - a. Significant improvement in disability and maintenance of improvement since initiation of IVIG therapy

G. Dermatomyositis or Polymyositis

1. Initial authorization of 3 months may be granted when the following criteria are met:

- a. Diagnosis established by clinical features (eg, proximal weakness, rash), elevated muscle enzyme levels, electrodiagnostic studies, and muscle biopsy (when available); supportive diagnostic tests include autoantibody testing and muscle imaging (eg, MRI), and
 - b. Standard first-line treatments (corticosteroids or immunosuppressants) have been tried but were unsuccessful or not tolerated, or
 - c. Member is unable to receive standard first-line therapy because of a contraindication or other clinical reason.
2. Re-authorization of 12 months may be granted when the following criterion is met:
 - a. Significant improvement in disability and maintenance of improvement since initiation of IVIG therapy

H. Guillain-Barre Syndrome (GBS)

Authorization of 2 months total may be granted when the following criteria are met:

1. Physical mobility is severely affected such that member requires an aid to walk.
2. IVIG therapy will be initiated within 2 weeks of symptom onset.

I. Myasthenia Gravis

Authorization of 1 month may be granted to members who are prescribed IVIG for worsening weakness, acute exacerbation, or in preparation for surgery.

1. Worsening weakness includes an increase in any of the following symptoms: diplopia, ptosis, blurred vision, difficulty speaking (dysarthria), difficulty swallowing (dysphagia), difficulty chewing, impaired respiratory status, fatigue, and limb weakness. Acute exacerbations include more severe swallowing difficulties and/or respiratory failure.
2. Pre-operative management (eg, prior to thymectomy)

J. Lambert-Eaton Myasthenic Syndrome (LEMS)

Authorization of 12 months may be granted for LEMS.

K. Kawasaki Syndrome

Authorization of 1 month may be granted for pediatric members who are prescribed IVIG for Kawasaki syndrome.

L. Idiopathic Thrombocytopenic Purpura (Immune Thrombocytopenia)

1. Newly diagnosed ITP (diagnosed within the past 3 months) or initial therapy: authorization of 1 month may be granted when the following criteria are met:
 - a. Children (< 18 years of age)
 - i. Significant bleeding symptoms (mucosal bleeding or other moderate/severe bleeding) or
 - ii. High risk for bleeding* (see Appendix B), or
 - iii. Rapid increase in platelets is required* (eg, surgery or procedure)
 - b. Adults (≥ 18 years of age)
 - i. Platelet count < 30,000/mcL, or
 - ii. Platelet count < 50,000/mcL and significant bleeding symptoms, high risk for bleeding or rapid increase in platelets is required*, and
 - iii. Corticosteroid therapy is contraindicated and IVIG will be used alone or IVIG will be used in combination with corticosteroid therapy
2. Chronic/persistent ITP (≥ 3 months from diagnosis) or ITP unresponsive to first-line therapy: authorization of 6 months may be granted when the following criteria are met:
 - a. Platelet count < 30,000/mcL, or
 - b. Platelet count < 50,000/mcL and significant bleeding symptoms, high risk for bleeding* or rapid increase in platelets is required*, and
 - c. Relapse after previous response to IVIG or inadequate response/intolerance/contraindication to corticosteroid or anti-D therapy
3. Adults with refractory ITP after splenectomy: authorization of 6 months may be granted when either of the following criteria is met:
 - a. Platelet count < 30,000/mcL, or
 - b. Significant bleeding symptoms
4. ITP in pregnant women: authorization through delivery may be granted to pregnant women with ITP.

* The member's risk factor(s) for bleeding (see Appendix B) or reason requiring a rapid increase in platelets must be provided.

M. Fetal/Neonatal Alloimmune Thrombocytopenia (F/NAIT)

Authorization of 6 months may be granted for pregnant women who are prescribed IVIG for F/NAIT.

N. Parvovirus B19-induced Pure Red Cell Aplasia (PRCA)

Authorization of 6 months may be granted for parvovirus B19-induced PRCA.

O. Stiff-person Syndrome

Authorization of 6 months may be granted for treatment of stiff-person syndrome in members who have experienced an inadequate response or intolerance, or have a contraindication to first-line therapy such as a benzodiazepine (eg, diazepam) and/or baclofen.

IV. CONTINUATION OF THERAPY

Reauthorization criteria apply to members who are currently receiving IVIG therapy through a paid pharmacy or medical benefit. All other members (including new members) must meet initial authorization criteria.

V. DOSAGE AND ADMINISTRATION

Approvals may be subject to dosing limits in accordance with FDA-approved labeling, accepted compendia, and/or evidence-based practice guidelines.

VI. OTHER

When Gammagard Liquid, Gamunex-C and Gammaked will be administered subcutaneously, they may be approved for primary immunodeficiency only.

VII. APPENDICES

Appendix A: Impaired Antibody Response to Pneumococcal Polysaccharide Vaccine

- Age 6 years and older: antibody levels are not \geq 1.3 mcg/mL for at least 70% of serotypes in the vaccine
- Age 2 to 5 years: antibody levels are not \geq 1.3 mcg/mL for at least 50% of serotypes in the vaccine
- Not established for children less than 2 years of age

Appendix B: Examples of Risk Factors for Bleeding (not all inclusive)

- Undergoing a medical or dental procedure where blood loss is anticipated
- Comorbidity (eg, peptic ulcer disease, hypertension)
- Mandated anticoagulation therapy
- Profession or lifestyle predisposes patient to trauma (eg, construction worker, fireman, professional athlete)

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