

Immune Globulin Intravenous

Medicare Advantage Medical Policy #MA-200

Original Effective Date: 04/01/2026

Current Effective Date: 04/01/2026

Policy:	Immune Globulin - Intravenous Utilization Management Medical Policy <ul style="list-style-type: none">• Alyglo™ (immune globulin intravenous solution-stwk – GC Biopharma)• Asceniv™ (immune globulin intravenous solution-sira – ADMA Biologics)• Bivigam® (immune globulin intravenous solution – AMDA Biologics)• Flebogamma® DIF (immune globulin intravenous solution – Grifols)• Gammagard Liquid (immune globulin solution – Takeda)• Gammagard S/D < 1 mcg/mL in 5% solution (immune globulin intravenous solution – Takeda)• Gammaked™ (immune globulin solution caprylate/chromatography purified – Kedrion)• Gammaplex® (immune globulin intravenous solution – BPL)• Gamunex®-C (immune globulin solution caprylate/chromatography purified – Grifols)• Octagam® (immune globulin intravenous solution – Octapharma)• Panzyga® (immune globulin intravenous solution-ifas – Octapharma/Pfizer)• Privigen® (immune globulin intravenous solution – CSL Behring)• Yimmugo® (immune globulin intravenous solution-dir – Biotest (Grifols)
DATE:	06/17/2025
Applicable Lines of Business:	Medicare Advantage - Medical
Applicable States/Territories:	Novitas JH – Colorado, New Mexico, Oklahoma, Texas, Arkansas, Louisiana, Mississippi Novitas JL – Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania
Applicable NCDs, LCDs, and/or LCAs	NCD 250.3, L35093, A56786

SUMMARY OF EVIDENCE

Immune globulin intravenous (IVIG) products are concentrated human immunoglobulins, primarily immunoglobulin G (IgG).

All of these products (except Octagam 10%) are FDA-approved for replacement therapy in patients with **primary immune deficiencies** due to defects in humoral immunity. The following indications are FDA approved:

- **B-cell chronic lymphocytic leukemia (CLL)**, for prevention of bacterial infections in patients with hypogammaglobulinemia and/or recurrent infections.^{6,18,21}
- **Chronic inflammatory demyelinating polyneuropathy (CIDP)**, to improve neuromuscular disability and impairment and for maintenance therapy to prevent relapse.^{5,7,9,12,15,67}
- **Dermatomyositis (or polymyositis)**. Octagam 10% is indicated for the treatment of dermatomyositis in adults.¹¹ Patients with dermatomyositis treated with Octagam were under treatment with corticosteroids and/or maximally two immune-suppressants OR patients had previous failure or intolerance with a corticosteroid and at least one additional immunosuppressive drug.³³ IVIG may be considered amongst the treatment options for patients with polymyositis not responding to first line immunosuppressive treatment.³²
- **Idiopathic (immune) thrombocytopenic purpura (ITP)**, acute and chronic, when a rapid rise in platelet count is needed to prevent and/or control bleeding or to allow a patient with ITP to undergo surgery.^{2,6-9,11,12,15,23-25}

- **Kawasaki disease** in pediatric patients for the prevention of coronary artery aneurysm.^{6,26} The American Heart Association and the American Academy of Pediatrics recommend initial therapy with 2 g of IVIG per kg as a single intravenous (IV) dose given over 10 to 12 hours.²⁶ The dose can be repeated if needed.
- **Multifocal motor neuropathy** in adults as maintenance therapy to improve muscle strength and disability.⁵
- **Primary humoral immune deficiency (PID)**, for replacement therapy, including but not limited to the humoral immune defect in the following conditions: common variable immunodeficiency, X-linked agammaglobulinemia [congenital agammaglobulinemia], Wiskott-Aldrich Syndrome, and severe combined immunodeficiencies.^{1-3,5-10,12,15,16,25,53,80} Gammagard Liquid 10%, Gammaked, and Gamunex-C may be administered via IV or subcutaneous infusion for primary immunodeficiency.^{5,7,9} IVIG is also indicated for measles prophylaxis in individuals with PID who have been exposed to measles or who are at high risk of measles exposure.^{3,7-10,12,13,17,25,45,80}

IVIG is prepared from pooled plasma collected from a large number of human donors.^{1-3,5-12,15,16,25} The donors in a typical pool of plasma have a wide range of antibodies against infectious agents. These products have IgG subclasses similar to that found in normal humans. Asceniv contains not only antibodies which satisfy the requirement to treat patients with PID, it also has elevated levels of respiratory syncytial virus (RSV) antibodies.¹⁹

IVIG also is used for many off-label indications. Much of the evidence for clinical effectiveness of IVIG is anecdotal (i.e., case reports, open series, or cohort studies). Some conditions have been studied in controlled trials. Usually, IVIG is indicated only if standard approaches have failed, become intolerable, or are contraindicated.

- **Antibody-mediated rejection (ABMR) in transplantation:** Current strategies for treatment of antibody-mediated rejection include plasmapheresis, IVIG, and T-cell or B-cell-depleting agents.⁷⁵ Although there are no controlled trials regarding the most appropriate treatments, the benefits of immune globulin have been well described and has been used as the standard-of-care (along with plasmapheresis) in multiple studies.^{18,76} Clinical practice guidelines (2009 Kidney Disease: Improving Global Outcomes) recommends a combination of corticosteroids, plasmapheresis, IVIG, anti-CD20 antibody, and lymphocyte-depleting antibody for antibody-mediated rejection.^{76,77} As in desensitization therapy, much of the information for IVIG use is in patients with kidney transplants, but the same principles apply to transplantation of other organs and tissues. Immune globulin has been used in lung transplant patients to treat ABMR^{20,44,78} and a scientific statement from the American Heart Association states that primary therapy for ABMR in patients with heart transplants may include IVIG, plasmapheresis, high-dose corticosteroids, and anti-lymphocyte antibodies.³⁶
- **Autoimmune mucocutaneous blistering diseases (pemphigus vulgaris, pemphigus foliaceus, bullous pemphigoid, mucous membrane pemphigoid [cicatricial pemphigoid], and epidermolysis bullosa acquisita):** Conventional therapy (a systemic corticosteroid and an immunosuppressive agent) is started at the same time or before IVIG. Many case reports and uncontrolled case series suggest benefit of IVIG in patients with recalcitrant disease or in those with contraindications to conventional therapy.²⁸⁻³⁰ International expert recommendations for the management of pemphigus note that first-line treatment includes corticosteroids and anti-CD20 monoclonal antibodies. First-line corticosteroid-sparing agents include azathioprine and mycophenolate mofetil, and other corticosteroid-sparing agents including IVIG.²
- **Aquaporin-4 Immunoglobulin Antibodies (AQP4-IgG)-positive Neuromyelitis Optica Spectrum Disorder (NMOSD):** NMOSD is an inflammatory disorder of the central nervous system characterized by severe, immune-mediated demyelination and axonal damage.³² The range

of NMOSD has expanded to include patients with aquaporin-4 (AQP4) antibody positivity who have single or recurrent attacks of optic neuritis, myelitis, or brainstem syndromes. Antibodies against AQP4 are present in the majority of NMOSD patients.⁵² The loss of AQP4 expression leads to loss of nervous system cells and neuron damage. Products recommended for long-term management of the condition include rituximab, azathioprine, mycophenolate, and therapeutic antibodies, such as Soliris® (eculizumab intravenous infusion), Ultomiris® (ravulizumab-cwvz intravenous infusion), Uplizna® (inebilizumab-cdon intravenous infusion), and Enspryng® (satralizumab-mwge subcutaneous injection). IVIG is recommended in children or in case of contraindications to other long-term therapies.⁵²

- **Cytomegalovirus (CMV) pneumonitis or pneumonia in patients with cancer or transplant-related infection:** For CMV pneumonia, therapy generally consists of antivirals (e.g., ganciclovir, foscarnet). The National Comprehensive Cancer Network (NCCN) guidelines on prevention and treatment of cancer-related infections (version 3.2024 – September 23, 2024) lists IVIG as an adjunctive therapy for CMV pneumonitis, but notes that IVIG use as an antiviral is controversial.³¹
- **Desensitization therapy prior to and immediately after transplantation:** Most of the information on use of IVIG for desensitization is in patients with kidney transplantation but many of the same principles apply to transplantation of other organs and tissues.^{34,35} Current protocols include using low-dose IVIG with plasma exchange or high-dose IVIG with or without B-cell depletions with rituximab.¹⁸
- **Guillain Barré syndrome (GBS):** The American Academy of Neurology recommends IVIG in patients who require aid to walk within 2 or 4 weeks from the onset of neuropathic symptoms.³⁷ The European Academy of Neurology/Peripheral Nerve Society guideline on diagnosis and treatment of GBS (2023) recommends IVIG or plasma exchange in patients for up to 4 weeks after onset of weakness.³⁸ For patients who are > 4 weeks of onset and are still deteriorating, other diagnoses should be considered. The guidelines additionally note that observational data indicates that a repeated course of IVIG can be effective in case of treatment-related fluctuation.
- **Hematologic neoplasm-associated hypogammaglobulinemia or hypogammaglobulinemia after B-cell targeted therapies (secondary immunodeficiency):** Clinical guidelines for immunoglobulin use by the National Health Service-England note secondary antibody deficiency can be hypogammaglobulinemia associated with therapeutic monoclonals targeted at B-cells and plasma cells, non-Hodgkin's lymphoma, CLL, multiple myeloma, or other relevant B-cell malignancies.²⁷ NCCN guidelines regarding management of immunotherapy-related toxicities (version 2.2024 – October 25, 2024) recommends that after anti-CD19 chimeric antigen receptor (CAR)-T cell therapy, IVIG replacement should be considered for patients with serum IgG levels < 400 to 600 mg/dL and serious or recurrent infections.⁷³
- **Hematopoietic cell transplantation (HCT) to prevent infections:** HCT is defined as transplantation of any blood- or marrow-derived hematopoietic stem cells, regardless of transplant type (i.e., allogeneic or autologous) or cell source (i.e., bone marrow, peripheral blood, or umbilical cord blood). With regard to IVIG, guidelines recommend IVIG for prevention or preemptive treatment of specific infections in HCT recipients.³⁹ In adult or adolescent HCT recipients (allogeneic or autologous), IVIG is used to prevent infections in those with severe hypogammaglobulinemia (i.e., serum IgG < 400 mg/dL) during the first 100 days after HCT. In pediatric patients, IVIG is indicated in those with an allogeneic HCT if hypogammaglobulinemia is severe during the first 100 days after HCT. For prevention of infections beyond 100 days post-HCT (allogeneic or autologous), IVIG is recommended in recipients with severe hypogammaglobulinemia (i.e., serum IgG < 400 mg/dL). Guidelines from the American Society for Blood and Marrow Transplantation make recommendations for IVIG dosing in HCT recipients to prevent infectious complications.³⁹ During the first 100 days after HCT, the dose in adults and adolescents is 0.5 g/kg per week. The IVIG dose should be individualized to maintain trough (pre-dose) serum IgG > 400 to 500 mg/dL. The dose in allogeneic pediatric HCT patients is 0.4 g/kg

per month, adjusted to keep IgG > 400 mg/dL. Higher and more frequent dosing may be necessary in patients for prevention of early disease after HCT because the half-life of IVIG is reduced to between 1 to 10 days in this population. Dosing for > 100 days post-HCT is 0.5 g/kg given every 3 to 4 weeks. The dose is not adjusted using serum IgG level in patients with multiple myeloma or malignant macroglobulinemia. NCCN guidelines on prevention and treatment of cancer-related infections discussed similar recommendations.³¹

- **Human immunodeficiency virus (HIV)- or Hepatitis C-associated thrombocytopenia:** Secondary ITP can occur in patients with HIV infection.^{23,24} It can also occur in patients with Hepatitis C. The American Society of Hematology (ASH) guidelines for ITP recommend initial treatment with corticosteroids, IVIG, or Rh0(D) immune globulin for patients with secondary ITP due to HIV. ASH also recommends IVIG for secondary ITP associated with Hepatitis C.^{23,24}
- **HIV-infected infants and children to prevent recurrent infections:** IVIG is recommended to prevent serious bacterial infections in HIV-infected children who have hypogammaglobulinemia (IgG < 400 mg/dL).⁴⁰ Clinicians providing care for adolescents are advised to use the US Department of Health and Human Services Adult and Adolescent HIV-guideline for the care of post-pubertal adolescents (sexual maturity rating [SMR] four and five) and to use the pediatric guideline for guidance on the care of adolescents at SMR 3 or lower.⁴⁰
- **Immune-Mediated Necrotizing Myopathy:** Muscle weakness is the predominant clinical feature and sometimes severely affects the lower limbs.⁵⁶ Pharyngeal muscles may also be affected and dysphagia is common. Serum creatine kinase (CK) is also high. The CK value can widely vary but is often well above 1,000 IU/L.⁶² Myositis-specific antibodies are often detected (e.g., anti-HMGCR antibodies, anti-SRP antibodies). Muscle imaging and biopsy can also be useful to confirm the diagnosis. International consensus guidelines recommend IVIG as a second-line agent for anti-HMGCR to avoid long-term disability.⁶³ For patients with anti-HMGCR monotherapy with IVIG has also been used.⁶²
- **Immunotherapy-related toxicities associated with checkpoint inhibitor therapy:** NCCN guidelines for the management of immunotherapy-related toxicities (version 2.2024 – October 25, 2024) recommends IVIG for the management of suspected myocarditis/pericarditis/large vessel vasculitis, severe pneumonitis after 48 hours of methylprednisolone therapy, severe myasthenia gravis, encephalitis, moderate or severe GBS, demyelinating disease, myositis, bullous dermatitis, and Stevens-Johnson syndrome/toxic epidermal necrolysis.⁷³ The American Society of Clinical Oncology also has practice guidelines on the management of immune-related adverse events in patients treated with checkpoint inhibitor therapy.⁷⁴ These practice guidelines note that corticosteroids may be administered for toxicities and refractory or severe cases may require other immunosuppressive therapies or IVIG.
- **Lambert-Eaton Myasthenic Syndrome:** Limited, but moderate- to high-quality evidence from randomized controlled trials have shown that 3,4-diaminopyridine or IVIG was associated with improved muscle strength score and compounded muscle action potential amplitudes. IVIG may be used as an alternative in patients who do not respond or do not tolerate other therapies.¹⁸
- **Multiple myeloma:** Patients with multiple myeloma are often functionally hypogammaglobulinemic with total immunoglobulin production being elevated, but the repertoire of antibody production restricted.³¹ The NCCN guidelines on multiple myeloma (version 1.2025 – September 17, 2024) recommends immune globulin replacement with CAR-T cell and bispecific antibody therapies, based on clinical context.⁴² NCCN also notes replacement can be considered for IgG < 400 mg/dL and recurrent life-threatening infections, making sure to consider the portion of IgG that is clonal.
- **Multiple sclerosis, acute severe exacerbation or relapses:** Medication options for relapse management include high dose corticosteroids, intramuscular adrenocorticotropic hormone, plasmapheresis, and IVIG. IVIG is sometimes used to treat relapses that do not respond to corticosteroids.⁴³ During pregnancy, relapses severe enough to require treatment can be safely

managed with a short-term course of corticosteroids after the first trimester. Methylprednisolone is the preferred agent because it is metabolized before crossing the placenta.⁴³

- **Myasthenia gravis:** Recommendations from an international consensus guidance statement for management of adult or juvenile myasthenia gravis include the use of IVIG in some patients.⁶⁵ Symptomatic and immunosuppressive treatment of myasthenia gravis includes pyridostigmine as initial therapy in most patients. Corticosteroids or immunosuppressive therapies are used in all patients with myasthenia gravis who have not met treatment goals after an adequate trial of pyridostigmine. A nonsteroidal immunosuppressive agent (e.g., azathioprine, cyclosporine, mycophenolate mofetil, methotrexate, tacrolimus) should be used alone when corticosteroids are contraindicated or refused. In patients with refractory myasthenia gravis, chronic IVIG and chronic plasma exchange (PLEX), cyclophosphamide, or rituximab may be used. PLEX and IVIG are recommended as short-term treatments in patients with myasthenia gravis with life-threatening effects such as respiratory insufficiency or dysphagia, to prepare for surgery in patients with significant bulbar dysfunction, when rapid response is needed, when other treatments are not adequate, and before starting corticosteroids if necessary to prevent or minimize exacerbations. IVIG can be considered as maintenance therapy in patients with refractory myasthenia gravis or in patients with relative contraindications to immunosuppressive agents. Refractory myasthenia gravis is defined as the post intervention status of unchanged or worse after corticosteroids and at least two other immunosuppressive agents used in adequate doses for an adequate duration, with persistent symptoms or side effects that limit functioning as defined by the patient or physician. The international consensus guidance statement for myasthenia gravis⁶⁵ recommends an initial dose of 2 g/kg given in divided doses over 2 to 5 days. For maintenance therapy, the recommended dose is 0.4 to 1 g/kg given every 4 weeks; an attempt to decrease frequency can be made over time. If additional treatment is required, the dose should be adjusted based on the response.
- **Myelin Oligodendrocyte Glycoprotein Antibody-Associated Disease (MOGAD):** International MOGAD Panel proposed criteria reports the central nervous system demyelinating features of this condition include optic neuritis (most common feature), acute disseminated encephalomyelitis (with or without optic neuritis), transverse myelitis, and other less common presentations.⁶⁹ Serological evidence of myelin oligodendrocyte glycoprotein (MOG)-IgG is also seen. MOGAD can present as an acute attack and relapses of attacks; a diagnosis of multiple sclerosis should be excluded. Disease flares in MOGAD are generally treated with high dose corticosteroids.⁷⁰ A typical dose used for IVIG is 0.4 g/kg/day for 5 days. Maintenance therapy is generally offered in patients who have had two or more attacks; however, exceptions are noted in cases to prevent further disability.⁷⁰ For maintenance infusions, a loading dose of 0.4 g/kg/day for 5 days can be given, followed by treatment every 4 weeks with a dose of 0.4 g/kg to 2 g/kg.
- **Passive immunization for measles (post-exposure prophylaxis):** When administered within 6 days of exposure, immune globulin (IG) can prevent or modify measles in patients who are nonimmune.¹³ IG therapy is not indicated in persons who have received one dose of measles-containing vaccine at \geq 12 months, unless the patient is severely immunocompromised. The Advisory Committee on Immunization Practices (ACIP) recommends the use of IG therapy for post-exposure prophylaxis of measles in the following patients who are at risk for severe disease and complication from measles: infants $<$ 12 months of age, pregnant women without evidence of measles immunity, and severely immunocompromised persons.¹³ For infants $<$ 12 months of age, intramuscular IG is used; infants 6 through 11 months of age can receive measles, mumps, and rubella vaccine instead of IG if given within 72 hours of exposure. IVIG is used for pregnant women and severely immunocompromised patients. ACIP recommends 400 mg/kg as an IV infusion.¹³ The American College of Obstetricians and Gynecologists Practice Advisory on pregnant patients during a measles outbreak (2024) recommends pregnant patients with suspected measles exposure, but without immunity (or those who cannot readily show evidence of immunity), should receive IVIG 400 mg/kg within 6 days of exposure.⁴

- **Post-exposure prophylaxis for varicella OR treatment or post-exposure prophylaxis for tetanus:** Children infected with HIV who lack evidence of immunity to varicella or who have severe immune suppression should receive VariZIG® (human varicella-zoster immune globulin for intramuscular administration)®.^{40,41} An alternative to varicella-zoster immune globulin for passive immunization is oral valacyclovir or acyclovir beginning 7 days after exposure, and if this is not available, IVIG administered once within 10 days after exposure.⁴¹ VariZIG is indicated for post-exposure prophylaxis in high risk individuals.⁴⁷ The dose is 400 mg/kg given once.^{40,41,46} Per the Centers for Disease Control and Prevention, if tetanus immune globulin is not available, clinicians can use immune globulin at a dose of 200 to 400 mg/kg.⁴⁸
- **Parvovirus B19 infection and pure red blood cell aplasia, immunologic subtype:** In immunosuppressed patients lacking neutralizing antibodies, IVIG has been useful for the treatment of persistent B19 infection.⁴⁹ The guidelines from the American Society of Transplantation Infectious Diseases Community of Practice state that IVIG is frequently used for the treatment of solid organ transplant recipients with symptomatic parvovirus B19 infection.⁶⁶ A Canadian expert panel of hematologists recommend prednisone followed by cyclophosphamide or cyclosporine as first-line therapy for immunologic type pure red blood cell aplasia.²² The panel considers IVIG a reasonable second-line option for this serious condition. Recent reviews note that 200 to 400 mg/kg/day for 5 to 10 days is considered the recommended treatment course.⁷⁹
- **Stiff-Person Syndrome (Moersch-Woltman Syndrome):** Per the European Federation of Neurological Societies, IVIG should be reserved for patients who have no symptomatic relief after the use of diazepam and/or baclofen and have severe disability in carrying out daily activities.³²
- **Thrombocytopenia, feto-neonatal alloimmune:** Antenatal therapy with IVIG administered to the mother is effective in increasing fetal platelet counts in neonatal alloimmune thrombocytopenia.^{50,51} First-line therapy for newborns with fetal/neonatal alloimmune thrombocytopenia is antigen-negative compatible platelets; IVIG is adjunctive therapy.

ANALYSIS OF EVIDENCE

The information provided in the summary of evidence is supported by labeled indications, CMS-approved compendia, published clinical literature, clinical practice guidelines, and/or applicable National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), and Local Coverage Articles (LCAs). Refer to the Sources of Information section of this policy for additional information.

POLICY STATEMENT

Prior authorization is recommended for medical benefit coverage of IVIG products. 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. 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. If the prescriber is switching between IVIG products and a case has already been approved by a clinician, a new approval may be entered without another clinical review. The new approval should only be extended for the remaining doses and duration which were granted on the original review. The indication (or diagnosis code) and dosing need to be the same as the original review. If the indication or dosing is different, a new clinical review would need to be completed. If the client is using the *Immune Globulin – Intravenous Medical Step Management Policy* in tandem with this Utilization Management policy, the new approval may be entered without another clinical review for a preferred product only.

This policy incorporates Medicare coverage guidance as set forth in National Coverage Determinations (NCDs) and Local Coverage Determinations (LCDs), as well as in companion policy articles and other guidance applicable to the relevant service areas. These documents are cited in the Sources of Information section of this policy. In some cases, this guidance includes specific lists of HCPCS and ICD-10 codes to help inform the coverage determination process. The Articles that include specific lists for billing and

coding purposes will be included in the Sources of Information section of this policy. However, to the extent that this policy cites such lists of HCPCS and ICD-10 codes, they should be used for reference purposes only. The presence of a specific HCPCS or ICD-10 code in a chart or companion article to an LCD is not by itself sufficient to approve coverage. Similarly, the absence of such a code does not necessarily mean that the applicable condition or diagnosis is excluded from coverage.

Note: Conditions for coverage outlined in this Medicare Advantage Medical Policy may be less restrictive than those found in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles. Examples of situations where this clinical policy may be less restrictive include, but are not limited to, coverage of additional indications supported by CMS-approved compendia and the exclusion from this policy of additional coverage criteria requirements outlined in applicable National Coverage Determinations, Local Coverage Determinations and/or Local Coverage Articles.

Indications with a ^ below are referenced in both the corresponding Standard Medical Utilization Management Internal Policy AND applicable National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), and/or Local Coverage Articles (LCAs). Coverage criteria for these indications may be internally developed and/or referenced in applicable NCDs, LCDs, and/or LCAs. For these indications, internally developed coverage criteria is denoted throughout the policy in the following manner: 1) IC-L (internal criteria supported by the labeled indication), 2) IC-COMP (internal criteria supported by CMS-approved compendia), 3) IC-ISGP (internal criteria intended to interpret or supplement general provisions outlined in applicable NCDs, LCDs, and/or LCAs), or 4) IC-EC (internal criteria intended to expand coverage beyond the coverage outlined in applicable NCDs, LCDs, and/or LCAs). For these indications, coverage criteria that is NOT denoted with one of the above indicators is referenced in applicable NCDs, LCDs, and/or LCAs. Additional information supporting the rationale for determination of internal coverage criteria can be found via the Sources of Information section.

Indications with a @ below are referenced in the corresponding Standard Medical Utilization Management Internal Policy, but are NOT directly referenced in applicable National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), and/or Local Coverage Articles (LCAs). Coverage criteria for these indications is internally developed. These indications and their respective coverage criteria represent expanded coverage beyond the coverage outlined in applicable NCDs, LCDs, and/or LCAs.

Indications with a # below are supported and referenced in applicable National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), and/or Local Coverage Articles (LCAs), but are NOT directly referenced in the corresponding Standard Medical Utilization Management Internal Policy. Coverage criteria for these indications is referenced in applicable NCDs, LCDs, and/or LCAs.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of IVIG products is recommended in those who meet one of the following criteria.

FDA-Approved Indications

1. Primary Immunodeficiencies. ^

Criteria. Approve for 1 year if the patient meets ONE of the following (A or B):

A) Initial Therapy. Approve if the patient meets BOTH of the following (i and ii):

i. Patient meets ONE of the following (a, b, or c):

Note: An exception can be made for the impaired antibody response if, according to the prescriber, the delay caused by pre-vaccination and post-vaccination antibody measurement would be deleterious to the patient's health. ^{IC-ISGP}

- a) Patient has a diagnosis of congenital agammaglobulinemia, X-linked agammaglobulinemia, other agammaglobulinemia due to the absence of B-cells, Wiskott-Aldrich syndrome, ataxia telangiectasia, DiGeorge syndrome, severe combined immunodeficiency, Hyper-Immunoglobulin M (IgM) syndromes, an IgG level lower than 250 mg/dL, or a primary immune deficiency which has been confirmed by genetic or molecular testing;^{IC-ISGP} OR
Note: Molecular testing is a type of genetic testing.
 - b) Patient has a diagnosis of common variable immunodeficiency, unspecified hypogammaglobulinemia, or other immunodeficiencies with significant hypogammaglobulinemia and meets BOTH of the following (1 and 2):^{IC-ISGP}
 - (1) Patient's pretreatment IgG level is below the normal range (age-adjusted and according to the normal reference range for the reporting laboratory);^{IC-ISGP} AND
 - (2) Patient meets ONE of the following [(a) or (b)]:
 - (a) Patient has an impaired antibody response (i.e., failure to produce antibodies to specific antigens);^{IC-ISGP} OR
 - (b) Patient has recurrent infections;^{IC-ISGP} OR
 - c) Patient has an IgG subclass deficiency, selective antibody deficiency (SAD), or another confirmed primary immunodeficiency and meets the following criteria (1 and 2):^{IC-ISGP}
 - (1) Patient has an impaired antibody response (i.e., failure to produce antibodies to specific antigens);^{IC-ISGP} AND
 - (2) Patient has recurrent infections;^{IC-ISGP} AND
- ii. The medication is prescribed by or in consultation with one of the following physician specialists: an allergist, immunologist, otolaryngologist (ear nose and throat [ENT] physician), pulmonologist, or infectious diseases physician who treats patients with primary immune deficiencies.^{IC-ISGP}
- B) Patient is Currently Receiving Immune Globulin.** Approve if the patient has been diagnosed with a primary immunodeficiency and, according to the prescriber, is continuing to receive benefit from the product.^{IC-ISGP}
- Note: Examples of continued benefit with the product includes increased IgG levels or prevention and/or controlling of infections.

Dosing. Approve the following dosing regimens (A, B, C, or D):

- A) An initial loading dose of 1 g/kg given intravenously one time; OR
- B) 0.2 g/kg to 0.8 g/kg given intravenously once every 3 to 4 weeks; OR
- C) The dose and interval between doses has been adjusted based on clinical response as determined by the prescriber; OR
- D) Patients with primary immune deficiency and exposure to measles (previous exposure or risk of future measles exposure), the minimum dose has been determined by the prescriber.

2. B-Cell Chronic Lymphocytic Leukemia for Prevention of Infections. ^

Criteria. 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 the following (i and ii):
- i. Patient meets ONE of the following (a or b):
 - a) The patient has an immunoglobulin G (IgG) level < 600 mg/dL (6.0 g/L);^{IC-ISGP} OR
 - b) The patient has a history of recurrent infections;^{IC-L} AND

- ii. The medication is prescribed by or in consultation with an oncologist, hematologist, or infectious diseases physician. ^{IC-ISGP}
- B) Patients Currently Receiving Immune Globulin: Approve for 1 year if the patient having a positive response to therapy according to the prescriber. ^{IC-ISGP}
Note: Examples of a positive response to therapy include maintaining an increased IgG trough level or a decrease in the number of infections.

Dosing. Approve the following dosing regimens (A, B, or C):

- A) 0.4 g/kg given intravenously every 3 to 4 weeks; OR
- B) 0.3 g/kg to 0.5 g/kg given intravenously once monthly; OR
- C) The dose and interval have been adjusted to maintain a trough (pre-dose) IgG level of greater than 500 mg/dL.

3. Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) or Polyradiculoneuropathy. [^]

Criteria. Approve for the duration noted if the patient meets ONE of the following (A or B):

- A) Initial Therapy: Approve for 3 months if the patient meets BOTH of the following (i and ii):
 - i. Electrodiagnostic studies support the diagnosis of CIDP; ^{IC-ISGP} AND
 - ii. The medication is prescribed by or in consultation with a neurologist. ^{IC-ISGP}
- B) Patients Currently Receiving Immune Globulin: Approve for 1 year if the patient has a clinically significant improvement in neurologic symptoms, as determined by the prescriber. ^{IC-ISGP}
Note: Examples of improvement in neurologic symptoms include improvement in disability; nerve conduction study results improved or stabilized; physical examination show improvement in neurological symptoms, strength (e.g., grip strength), and sensation.

Dosing. Approve the following dosing regimens (A, B, or C):

- A) An initial loading dose of 2 g/kg given intravenously in divided doses over 2 to 5 consecutive days; OR
- B) A maintenance dose of 1 g/kg given intravenously in divided doses over 1 to 4 consecutive days given every 3 weeks; OR
- C) The dose and interval are adjusted according to clinical response with a maximum dose per treatment course of 2 g/kg.

4. Dermatomyositis or Polymyositis. [^]

Criteria. 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 the following (i, ii, iii and iv):
 - i. Prior to starting any therapy for this condition, the patient meets one of the following (a or b):
 - a. Patient has or had an elevated creatinine kinase (CK) level, according to the prescriber; ^{IC-ISGP} OR
 - b. Other measures support the diagnosis, according to the prescriber, including, but not limited to, skin manifestations, autoantibody testing, muscle biopsy results, electromyographic (EMG) findings; ^{IC-ISGP} AND
 - ii. The patient has tried a systemic corticosteroid OR a corticosteroid is contraindicated according to the prescriber; ^{IC-ISGP} AND
 - iii. The patient has tried an immunosuppressive agent OR an immunosuppressive agent is contraindicated according to the prescriber; ^{IC-ISGP} AND

Note: Examples of immunosuppressive agents include azathioprine, methotrexate, cyclosporine, cyclophosphamide, and mycophenolate mofetil.

- iv.** The medication is prescribed by or in consultation with a neurologist or a rheumatologist.
IC-ISGP

- B)** **Patients Currently Receiving Immune Globulin.** Approve for 1 year if the patient has responded to therapy according to the prescriber.

Note: Examples of a response to therapy includes improved muscle strength, improved neuromuscular symptoms, and improved functional ability.

Dosing. Approve the following dosing regimens (A or B):

- A)** 2 g/kg given intravenously in divided doses over 2 to 5 consecutive days every 4 weeks; OR
B) 2 g/kg given intravenously in divided doses over 2 to 5 consecutive days every 2 to 3 weeks.

5. Immune Thrombocytopenia (ITP). [^]

Note: The diagnosis of Immune Thrombocytopenia (ITP) encompasses previous nomenclature, such as Idiopathic Thrombocytopenia, Idiopathic Thrombocytopenic Purpura, Immune Thrombocytopenic Purpura.

Criteria. Approve for the duration noted if the patient meets ONE of the following (A, B, C, D or E):

- A)** **Initial Therapy: Adults \geq 18 Years of Age:** Approve for 3 months if the patient meets ONE of the following (i and ii):

- i.** Patient meets ONE of the following (a, b, or c):
a. The patient has tried a systemic corticosteroid (e.g., prednisone); IC-ISGP OR
b. There is an urgent need to increase the platelet count quickly; IC-L OR
c. A systemic corticosteroid is contraindicated according to the prescriber; IC-ISGP AND
ii. The medication is prescribed by or in consultation with a hematologist. IC-ISGP

- B)** **Initial Therapy - Patient is $<$ 18 Years of Age:** Approve for 3 months if prescribed by or in consultation with a hematologist. IC-ISGP

- C)** **Initial Therapy - To Increase Platelet Counts Before Surgical Procedures or Dental Procedures:** Approve for 1 month if prescribed by or in consultation with a hematologist. IC-ISGP

- D)** **Initial Therapy - Pregnant Patient:** Approve for 6 months if prescribed by or in consultation with a hematologist. IC-ISGP

- E)** **Patient is Currently Receiving Immune Globulin OR Requires Retreatment with Immune Globulin:** Approve for 1 year if the patient is responding to therapy OR if the patient has previously responded to therapy, according to the prescriber. IC-ISGP

Note: Examples of responding to therapy include increased platelet counts, absence of significant bleeding, or preventing hemorrhage/ensuring an adequate platelet count in order for delivery in pregnant patients.

Dosing. Approve the following dosing regimens (A or B):

- A)** Up to 1 g/kg on 2 consecutive days OR up to 0.4 g/kg on 5 consecutive days (up to a total of 2 g per kg per treatment course); OR
B) The dose and interval between doses has been adjusted according to the platelet count and/or to prevent significant bleeding as determined by the prescriber.

6. Kawasaki Disease. [^]

Criteria. Approve for 3 months if prescribed by or in consultation with a pediatric cardiologist or a pediatric infectious diseases physician. ^{IC-ISGP}

Dosing. Approve up to 2 g/kg given intravenously as a single dose or over multiple consecutive days. The dose may be repeated if needed.

7. Multifocal Motor Neuropathy. [^]

Criteria. 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 BOTH of the following (i and ii):

- i. The diagnosis is supported by weakness without sensory abnormalities, upper motor neuron signs, or marked bulbar involvement and meets one of the following (a, b, or c):
^{IC-ISGP}
 - a. The diagnosis is supported by nerve conduction studies that demonstrate motor conduction block or probable motor conduction block; ^{IC-ISGP} OR
 - b. The prescriber has determined the patient has multifocal motor neuropathy without conduction block; ^{IC-ISGP} OR
 - c. The diagnosis is supported by a motor nerve biopsy or by a magnetic resonance imaging (MRI) neurography; ^{IC-ISGP} AND
- ii. The medication is prescribed by or in consultation with a neurologist. ^{IC-ISGP}

B) Patients Currently Receiving Immune Globulin: Approve for 1 year if the patient has improvement in neurologic symptoms as determined by the prescriber. ^{IC-ISGP}

Note: Examples of improvement in neurologic symptoms include improvement in disability; grip strength improvement (measured with dynamometer); physical examination show improvement in neurological symptoms and strength.

Dosing. Approve the following dosing regimens (A or B):

A) Therapy is initiated with 2 g/kg given intravenously in divided doses over 2 to 5 consecutive days;
OR

B) One of the following maintenance dosing regimen is used (i, ii or iii):

- i. 0.5 g/kg to 2.4 g/kg given intravenously every month; OR
- ii. 1 g/kg given intravenously every 2 to 4 weeks; OR
- iii. 2 g/kg given intravenously every 1 to 2 months.

Other Uses with Supportive Evidence

8. Antibody-Mediated Rejection in Transplantation. [^]

Criteria. Approve for 1 year if prescribed by or in consultation with a physician affiliated with a transplant center. ^{IC-ISGP}

Dosing. Approve the following dosing regimens (A or B):

A) Up to 2 g/kg as an intravenous infusion (as a single dose or divided in smaller doses [e.g., 400 mg per kg daily for 5 days]); OR

B) The dosage is based on a transplant center's protocol.

9. Autoimmune Mucocutaneous Blistering Diseases (Pemphigus Vulgaris, Pemphigus Foliaceus, Bullous Pemphigoid, Mucous Membrane Pemphigoid [Cicatricial Pemphigoid], and Epidermolysis Bullosa Acquisita). [^]

Criteria. 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 BOTH of the following (i and ii):

i. Patient meets ONE of the following (a, b, or c):

a. Patient meets BOTH of the following (1 and 2):

(1) Patient has tried a systemic corticosteroid OR a corticosteroid is contraindicated according to the prescriber; ^{IC-ISGP} AND

(2) Patient has tried an immunosuppressive agent OR an immunosuppressive agent is contraindicated according to the prescriber; ^{IC-ISGP} OR

Note: Examples of immunosuppressive agents include azathioprine, cyclophosphamide, dapsone, methotrexate, cyclosporine, mycophenolate mofetil, and tacrolimus.

b. The patient has rapid, debilitating, progressive disease, that cannot be controlled with a systemic corticosteroid and an immunosuppressive agent; ^{IC-ISGP} OR

c. The disease is so serious that there is inadequate time for therapy with a systemic corticosteroid and an immunosuppressive agent to have a rapid enough effect. ^{IC-ISGP}

ii. The medication is prescribed by or in consultation with a dermatologist. ^{IC-ISGP}

B) Patients Currently Receiving Immune Globulin: Approve for 1 year if the patient has responded to therapy according to the prescriber. ^{IC-ISGP}

Note: Examples of response to therapy can include healing of previous lesions or fewer new lesions.

Dosing. Approve the following dosing regimens (A, B, or C):

A) 2 g/kg per cycle given intravenously every 3 to 4 weeks. This dose is divided over 2, 3, or 5 consecutive days; OR

B) In patient with aggressive ocular disease, such as ocular cicatricial pemphigoid, 2 g/kg given intravenously may be given every 2 weeks in divided doses over 2, 3, or 5 consecutive days; OR

C) The frequency is gradually being slowly decreased as the lesions resolve and heal.

10. Cytomegalovirus Pneumonitis or Pneumonia in Patients with Cancer or Transplant-Related Infection. [@]

Criteria. Approve for 2 months if prescribed by or in consultation with an oncologist, hematologist, or an infectious diseases physician.

Dosing. Approve 400 mg/kg given intravenously every other day for 3 to 5 doses.

11. Desensitization Therapy Prior to and Immediately after Transplantation. [^]

Criteria. Approve for 1 year if prescribed by or in consultation with a physician affiliated with a transplant center. ^{IC-ISGP}

Dosing. Approve the following dosing regimens (A or B):

- A)** Up to 2 g/kg per month administered intravenously (as a single dose or divided in smaller doses [e.g., 400 mg per kg daily for 5 days]); OR
- B)** The dosage is based on a transplant center's protocol.

12. Guillain Barre Syndrome. ^

Criteria. Approve for the duration noted if the patient meets ONE of the following (A or B):

- A) Initial Therapy.** Approve for 1 month (this is to provide one course of therapy) if the patient meets BOTH of the following (i and ii):
 - i.** Patient meets ONE of the following (a or b):
 - a.** The medication is initiated within 2 weeks and no longer than 4 weeks after onset of neuropathic symptoms; ^{IC-ISGP} OR
Note: Examples of neuropathic symptoms include weakness, inability to stand or walk without assistance, and respiratory or bulbar weakness.
 - b.** Patient has had a relapse (treatment related fluctuation), but had an initial response to IVIG; ^{IC-ISGP} AND
 - ii.** The medication is prescribed by or in consultation with a neurologist or a specialist with experience in diagnosing and treating patients with Guillain Barre syndrome. ^{IC-ISGP}
- B) Patient is Currently Receiving Immune Globulin.** Approve for 1 month.

Dosing. Approve 2 g/kg administered intravenously in divided doses over 2 to 5 days.

13. Hematologic Neoplasm-Associated Hypogammaglobulinemia or Hypogammaglobulinemia after B-cell Targeted Therapies (Secondary Immunodeficiency [SID]). @

Note: Some examples of B-cell targeted therapy are chimeric antigen receptor (CAR)-T cell therapy (e.g., Kymriah [tisagenlecleucel intravenous infusion], Abecma [idecabtagene vicleucel intravenous infusion], Breyanzi [lisocabtagene maraleucel intravenous infusion], Tecartus [brexucabtagene autoleucel intravenous infusion], Yescarta [axicabtagene ciloleucel intravenous infusion]), a rituximab product, Besponsa (inotuzumab ozogamicin intravenous infusion).

Note: Refer to B-Cell Chronic Lymphocytic Leukemia (CLL) for Prevention of Infections and Multiple Myeloma for diagnosis-specific criteria.

Criteria. Approve for 6 months if the patient meets ONE of the following (A or B):

- A) Initial Therapy:** Approve if the patient meets ALL of the following (i, ii, and iii):
 - i.** The patient has an immunoglobulin G (IgG) level of < 600 mg/dL (6.0 g/L) [excluding paraprotein]; AND
 - ii.** The patient has recurrent or severe infections or there is a high risk of infection, according to the prescriber; AND
 - iii.** The medication is being prescribed by or in consultation with an oncologist, hematologist, infectious disease physician, or immunologist.
- B) Patients Currently Receiving Immune Globulin:** Approve if the patient is having a positive response to therapy according to the prescriber.
Note: Examples of a positive response to therapy include maintaining an increased IgG trough level or a decrease in the number of infections.

Dosing. Approve the following dosing regimens (A, B, or C):

- A) 0.4 g/kg to 0.6 g/kg given intravenously once a month; OR
- B) 0.2 g/kg to 0.8 g/kg given intravenously once every 3 to 4 weeks; OR
- C) The dose and interval between doses has been adjusted based on clinical response as determined by the prescriber.

14. Hematopoietic Stem Cell Transplant.⁷⁹ ^

Criteria.⁷⁹ Approve for the duration noted if the patient meets ONE of the following (A or B):

- A) Initial Therapy. Approve for 3 months if the patient meets ALL of the following (i, ii, and iii):
 - i. Patient meets ALL of the following (a, b, c and d):
 - a) Patient is a recipient of an allogeneic hematopoietic stem cell transplant; AND
 - b) Patient has chronic graft versus host disease (GVHD); AND
 - c) Patient has recurring bacterial infections; AND
 - d) Patient has subprotective antibody levels following immunization against diphtheria, tetanus, or pneumococcal infection; AND
 - ii. Patient meets ALL of the following (a, b, c and d):
 - a) The medication is NOT being used for routine use in the immediate peri-transplantation period for the prevention of infection or GVHD following marrow or peripheral blood allogeneic transplantation; AND
 - b) The medication is NOT being used for acute GVHD with hematopoietic stem cell transplantation in the immediate post-transplantation phase; AND
 - c) The medication is NOT being used for hematopoietic stem cell transplantation in the immediate post-transplantation phase with a history of sinusoidal obstructive syndrome; AND
 - d) The requested medication is NOT being used for cord blood stem cell transplantation; AND
 - iii. The medication is prescribed by or in consultation with a hematologist, oncologist, or infectious diseases physician. ^{IC-ISGP}
- B) Patient is Currently Receiving Immune Globulin. Approve for 6 months if the patient is having a positive response to therapy according to the prescriber. ^{IC-ISGP}
Note: Examples of a positive response to therapy include maintaining an increased IgG trough level, controlling the number of infections, or a decrease in the number of infections.

Dosing. Approve the following dose: 0.5 g per kg IV infusion every 3 to 4 weeks.

Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

15. Human Immunodeficiency Virus (HIV)- or Hepatitis C-Associated Thrombocytopenia. @

Criteria. Approve for 1 month if the patient meets BOTH of the following (A and B):

- A) Patient is receiving antiviral therapy; AND
- B) The medication is prescribed by or in consultation with an infectious diseases specialist, a physician who specializes in the treatment of HIV infection, a gastroenterologist, hepatologist, or a liver transplant physician.

Dosing. Approve the following dosing regimens (A or B):

- A) Up to 2 g/kg given intravenously in divided doses over 2 to 5 days; OR

- B)** Up to 1 g/kg one time given intravenously up to once weekly.

16. Human Immunodeficiency Virus (HIV), to Prevent Recurrent Infections. [®]

Criteria. 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 the following (i, ii, iii, and iv):
- i. Patient is < 18 years of age; AND
 - ii. Patient is receiving combination antiretroviral therapy; AND
 - iii. Patient has ONE of the following (a, b, or c):
 - a. Hypogammaglobulinemia (i.e., IgG < 400 mg/dL [4.0 g/L]); OR
 - b. Functional antibody deficiency is demonstrated by poor specific antibody titers (that is, the patient does not develop specific antibody responses against protein and polysaccharide antigens); OR
 - c. Functional antibody deficiency is demonstrated by the patient having recurrent (two or more per year), serious infections (e.g., bacteremia, meningitis, pneumonia) despite administration of combination antiretroviral therapy and appropriate antimicrobial prophylaxis; AND
 - iv. The medication is prescribed by or in consultation with an infectious diseases specialist or an immunologist.
- B) Patient is Currently Receiving Immune Globulin.** Approve for 1 year if the frequency and/or severity of infections have decreased according to the prescriber.

Dosing. Approve the following dosing regimens (A or B):

- A)** The dose is 0.4 g/kg given intravenously infusion every 2 to 4 weeks; OR
B) The dose and interval are adjusted according to clinical effectiveness.

Note: Examples of adjusting according to clinical effectiveness may include the need to increase the dose or frequency based on frequency or severity of infections, hospitalizations, days of school or work missed, failure to thrive.

17. Immunotherapy-Related Toxicities Associated with Checkpoint Inhibitor Therapy. [®]

Note: Examples of checkpoint inhibitors are Keytruda (pembrolizumab injection), Opdivo (nivolumab injection), Yervoy (ipilimumab injection), Tecentriq (atezolizumab injection), Bavencio (avelumab injection), Imfinzi (durvalumab injection), Libtayo (cemiplimab injection), Jemperli (dostarlimab injection).

Criteria. Approve for the duration noted if the patient meets ONE of the following (A or B):

- A) Initial Therapy:** Approve for 1 month if the patient meets the following (i, ii or iii):
- i. Patient has tried a systemic corticosteroid and has not adequately responded to therapy; OR
Note: Examples of systemic corticosteroids include prednisone, methylprednisolone.
 - ii. The medication is being started with a systemic corticosteroid; OR
 - iii. A corticosteroid is contraindicated per the prescriber.
- B) Patient is Currently Receiving Immune Globulin.** Approve for 6 months if the patient is having a positive response to therapy, as determined by the prescriber, and the prescriber has determined extended therapy is required.

Dosing. Approve the following dosing regimens (A, B, or C):

- A) Up to 0.4 g/kg given intravenously daily for 5 days; OR
- B) Up to 2 g/kg given intravenously over 2 to 5 days; OR
- C) The dose and interval between doses has been adjusted based on clinical response as determined by the prescriber.

18. Lambert-Eaton Myasthenic Syndrome (LEMS). [^]

Criteria. Approve for the duration noted if the patient meets ONE of the following (A or B):

- A) Initial Therapy: Approve for 1 month (to allow for one course of therapy) if the patient meets ALL of the following (i, ii, and iii):
 - i. The patient is having refractory weakness after symptomatic treatment of LEMS with an amifampridine product (e.g., Firdapse, Ruzurgi), guanidine, or pyridostigmine or the patient is intolerant of an amifampridine product (e.g., Firdapse, Ruzurgi), guanidine, or pyridostigmine; ^{IC-ISGP} AND
 - ii. The patient meets ONE of the following (a or b):
 - a. The patient has paraneoplastic LEMS; ^{IC-ISGP} OR
 - b. The patient has non-paraneoplastic LEMS AND has tried a systemic corticosteroid (e.g., prednisone) or another immunosuppressive agent (e.g., azathioprine), or has a contraindication or intolerance to corticosteroids and/or immunosuppressive agents, according to the prescriber. ^{IC-ISGP}
 - iii. The medication is prescribed by or in consultation with a neurologist. ^{IC-ISGP}

- B) Patients Currently Receiving Immune Globulin: Approve for 1 year if the patient has a response or continued effectiveness, according to the prescriber. ^{IC-ISGP}

Note: Examples of a response to therapy include improved muscle strength or other clinical response.

Dosing. Approve the following dosing regimens (A or B):

- A) Up to 2 g/kg given intravenously in divided doses over 2 to 5 consecutive days; OR
- B) Maintenance therapy every 4 weeks with up to 2 g/kg with the dose being adjusted based on clinical symptoms.

19. Multiple Myeloma. [^]

Criteria. 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 BOTH of the following (i and ii):

- i. Patient meets ONE of the following (a or b):
 - a. Patient has, or is at risk of, severe, recurrent infections according to the prescriber; OR
 - b. The patient will be starting, has taken, or is currently receiving chimeric antigen receptor (CAR)-T cell therapy OR bispecific antibody therapy; ^{IC-EC} AND
 - Note: Examples of CAR-T cell therapy includes: Abecma (idecabtagene vicleucel intravenous infusion), Carvykti (ciltacabtagene autoleucel infusion).
 - Note: Examples of bispecific antibody therapy includes: Elravax (elranatamab-bcmm subcutaneous injection), Tecvayli (teclistamab-cqyy subcutaneous injection), Talvey (talquetamab-tgvs subcutaneous injection).

- ii. The medication is prescribed by or in consultation with a hematologist, oncologist, or infectious diseases specialist. ^{IC-ISGP}

- B) Patients Currently Receiving Immune Globulin. Approve for 1 year.

Dosing. Approve 0.4 g/kg to 0.5 g/kg given intravenously every 3 to 4 weeks.

20. Multiple Sclerosis (MS), Acute Severe Exacerbation or Relapses. [^]

Criteria. Approve for 1 month (this is to provide one course of therapy) if the patient meets ALL of the following (A, B, and C):

A) Patient meets ONE of the following (i or ii):

- i. The patient has either not responded to OR has had a significant adverse reaction with systemic corticosteroids (e.g., methylprednisolone sodium succinate injection) OR plasma exchange; ^{IC-ISGP} OR

Note: A trial of Acthar H.P. gel [repository corticotropin injection; adrenocorticotropic hormone, ACTH] would also count toward meeting this requirement.

- ii. A systemic corticosteroid is contraindicated, according to the prescriber; ^{IC-ISGP} AND

B) Patient meets ONE of the following (i or ii):

- i. Patient is already on maintenance therapy for MS or will be starting maintenance therapy for MS; ^{IC-ISGP} OR

Note: Maintenance therapy does NOT include IVIG. Examples of maintenance therapy for MS would include: Avonex (interferon beta-1a injection), Plegridy (peginterferon beta-1a injection), Rebif (interferon beta-1a injection), Betaseron (interferon beta-1b injection)/Extavia (interferon beta-1b injection), Copaxone (glatiramer injection)/Glatopa (glatiramer injection), Gilenya (fingolimod capsule), Lemtrada (alemtuzumab injection), Aubagio (teriflunomide tablet), Mavenclad (cladribine tablet), Mayzent (siponimod tablet), Tecfidera (dimethyl fumarate capsule), Vumerity (diroximel fumarate capsule), Zeposia (ozanimod capsule), Tysabri (natalizumab injection), Novantrone (mitoxantrone injection), Bafertam (monomethyl fumarate capsule), Kesimpta (ofatumumab injection), Ocrevus (ocrelizumab injection), Penvoy (penesimod tablet).

- ii. Patient is pregnant or patient is post-partum and the prescriber has determined maintenance therapy is not clinically appropriate; ^{IC-ISGP} AND

C) The medication is prescribed by or in consultation with a neurologist or a physician who specializes in the treatment of MS. ^{IC-ISGP}

Dosing. Approve the following dosing regimens (A or B):

A) A single 1 g/kg given intravenously ; OR

B) 0.4 g/kg per day IV infusion for 5 consecutive days.

21. Myasthenia Gravis. [^]

Criteria. Approve for the duration noted if the patient meets ONE of the following (A, B, C or D):

A) Initial Therapy for Short-Term (Acute) Use. Approve for 5 days (to allow for one course of therapy) if the patient meets BOTH of the following (i and ii):

i. Patient meets ONE of the following conditions (a, b, c, or d):

- a) Patient has an exacerbation of myasthenia gravis; ^{IC-ISGP} OR

- b) Patient requires stabilization of myasthenia gravis before surgery; ^{IC-ISGP} OR

- c) Patient has been started on an immunosuppressive drug and is waiting for full effect; ^{IC-ISGP} OR

Note: Examples of immunosuppressive drugs include azathioprine, cyclosporine, cyclophosphamide, mycophenolate mofetil, methotrexate, or tacrolimus.

- d) Patient is starting therapy with a corticosteroid and IVIG is being given to prevent or minimize exacerbations; ^{IC-ISGP} AND
 - ii. The medication is prescribed by or in consultation with a neurologist. ^{IC-ISGP}
- B) Patient is Currently Receiving Immune Globulin Short-Term (Acute) Use. Approve for 5 days (to allow for one course of therapy).
- C) Initial Therapy for Maintenance. Approve for 1 year if the patient meets ALL of the following (i, ii, iii, and iv):
 - i. Patient has refractory myasthenia gravis; ^{IC-ISGP} AND
 - ii. Patient has tried pyridostigmine; ^{IC-ISGP} AND
 - iii. Patient has tried immunosuppressive therapy with at least one of the following agents: azathioprine, cyclosporine, cyclophosphamide, mycophenolate mofetil, methotrexate, tacrolimus AND has had an inadequate response; ^{IC-ISGP} AND
 - iv. The medication is prescribed by or in consultation with a neurologist. ^{IC-ISGP}
- D) Patient is Currently Receiving Immune Globulin for Maintenance Therapy. Approve for 1 year if the patient is responding according to the prescriber. ^{IC-ISGP}
Note: Examples of responding to therapy include improvement in weakness (bulbar, limb, or respiratory), improvement with ocular symptoms.

Dosing. Approve the following dosing regimens (A, B, or C):

- A) Short-term use: 2 g/kg given intravenously in divided doses over 2 to 5 consecutive days; OR
- B) Maintenance therapy: 0.4 g/kg to 1 g/kg given intravenously every 4 weeks; OR
- C) The dose and interval between doses has been adjusted based on clinical response as determined by the prescriber.

22. Passive Immunization for Measles (Post-Exposure Prophylaxis). [@]

Note: For patients with primary immune deficiency, see criteria for PID.

Criteria. Approve for 1 day (to allow for a single dose) if the patient meets ONE of the following (A or B):

- A) The patient is pregnant and meets the following (i and ii):
 - i. The patient has been exposed to measles; AND
 - ii. The patient cannot readily show evidence of immunity against measles (e.g., the patient does not have a history of the disease or age-appropriate vaccination); OR
- B) The patient meets ALL of the following (i and ii):
 - i. The patient is immunocompromised; AND
 - ii. The patient has been exposed to measles.

Dosing. Approve the following dosing regimen: 0.4 g/kg intravenously administered one time.

23. Post-Exposure Prophylaxis for Varicella OR Treatment or Post-Exposure Prophylaxis for Tetanus. [@]

Criteria. Approve for 1 day (to allow for a single dose) if the patient meets ONE of the following criteria (A or B):

- A) For Varicella post-exposure, Varicella immune globulin is not available or cannot be administered; OR

- B)** For Tetanus treatment or post-exposure, Tetanus Immune globulin is not available.

Dosing. Approve the following dosing regimens (A or B):

- A) 0.4 g/kg given intravenously one time; OR
B) 0.2 to 0.4 g/kg given intravenously one time.

24. Parvovirus B19 Infection. [®]

Criteria. Approve for the duration noted if the patient meets ONE of the following (A or B):

- A) Initial Therapy: Approve for 2 months if the patient meets BOTH of the following (i and ii):
i. Patient has an immunodeficiency condition; AND
Note: Examples of an immunodeficiency condition include patients with HIV infection, solid organ transplants (e.g., renal, liver), chemotherapy for hematologic malignancy.
ii. The medication is prescribed by or in consultation with an infectious diseases specialist, immunologist, hematologist, or transplant specialist.
- B) Patients Currently Receiving Immune Globulin: Approve for 6 months.

Dosing. Approve the following dosing regimens (A, B, C or D):

- A) 2 g/kg given intravenously over a period of 2 to 5 consecutive days; OR
B) 0.4 g/kg to 0.5 g/kg given intravenously daily for 5 days; OR
C) 0.4 g/kg given intravenously once every 4 weeks; OR
D) 0.2 g/kg to 0.4 g/kg given intravenously daily for 5 to 10 days.

25. Pure Red Blood Cell Aplasia (PRCA), Immunologic Subtype. [®]

Criteria. Approve for the duration noted if the patient meets ONE of the following (A or B):

- A) Initial Therapy: Approve for 1 month if the patient meets ALL of the following (i, ii, and iii):
i. The patient has tried a systemic corticosteroid (e.g., prednisone); AND
ii. The patient has tried either cyclophosphamide OR cyclosporine; AND
iii. The medication is prescribed by or in consultation with an infectious diseases specialist, immunologist, hematologist, or transplant specialist.
- B) Patients Currently Receiving Immune Globulin: Approve for 1 month if the patient has responded with an increase in hemoglobin and reticulocytosis, according to the prescriber.

Dosing. Approve 0.5 g/kg given intravenously for 4 weeks.

26. Stiff-Person Syndrome (Moersch-Woltman Syndrome). [^]

Criteria. Approve for the duration noted if the patient meets ONE of the following (A or B):

- A) Initial Therapy: Approve for 3 months if the patient meets both of the following (i and ii):
i. Patient meets ONE of the following criteria (a or b):
a. Patient has tried a benzodiazepine (e.g., diazepam) OR baclofen; ^{IC-ISGP} OR
b. Patient has contraindications to both a benzodiazepine AND baclofen according to the prescriber; ^{IC-ISGP} AND
ii. The medication is prescribed by or in consultation with a neurologist. ^{IC-ISGP}

- C) Patients Currently Receiving Immune Globulin: Approve for 1 year if the patient has responded to therapy according to the prescriber. ^{IC-ISGP}

Note: Examples of response to therapy includes reduced stiffness or frequency of spasms, ability to walk unassisted.

Dosing. Approve the following dosing regimens (A or B):

- A) 2 g/kg given intravenously over a period of 2 to 5 consecutive days every month; OR
B) For maintenance therapy, the dose is adjusted to provide the minimum effective dosage of IVIG. Maximum dose is 2 g/kg given intravenously.

27. Thrombocytopenia, Feto-neonatal Alloimmune. [@]

Criteria. Approve for 6 months if the pregnant mother or newborn patient is prescribed the medication by or in consultation with a hematologist or an obstetrician.

Dosing. Approve the following dosing regimens (A, B, C, or D):

- A) For the mother: 1 g/kg given intravenously every week; OR
B) For the mother: 2 g/kg given intravenously every week; OR
C) For the mother: 1 g/kg given intravenously twice weekly; OR
D) For the newborn: 1 g/kg to 2 g/kg given intravenously dosed per the prescriber.

28. Treatment of Hypogammaglobulinemia Secondary to Solid Organ Transplant. ^{79 #}

Criteria.⁷⁹ Approve for 6 months if the requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing. Approve the following dosing regimens (A, B, or C):

- A) 0.4 g/kg to 0.6 g/kg given intravenously once a month; OR
B) 0.2 g/kg to 0.8 g/kg given intravenously once every 3 to 4 weeks; OR
C) The dose and interval between doses has been adjusted based on clinical response as determined by the prescriber.

29. Autoimmune Hemolytic Anemia. ^{79 #}

Criteria.⁷⁹ Approve for 7 days (to allow for one course of therapy to be given over 5 to 7 consecutive days) if the patient meets BOTH of the following (A and B):

- A) The patient has failed to respond to other treatments (e.g., corticosteroids, immunosuppressive agents, rituximab, splenectomy); AND
B) The requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.⁸² Approve one of the following dosing regimens (A or B):

- A) 0.2 to 0.4 g/kg/day (continuous 12 hour infusion) for 5 days; OR
B) 1 g/kg/day for 5 to 7 days.

Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

30. Systemic Capillary Leak Syndrome.⁷⁹ #

Criteria.⁷⁹ Approve for 1 year if the requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.⁸³ Approve doses up to 2 g/kg administered monthly.

Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

31. Stevens-Johnson Syndrome.⁷⁹ #

Criteria.⁷⁹ Approve for 5 days (to allow for one course of therapy either as a single dose or to be given in divided doses over 2 to 5 consecutive days) if the requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.⁸⁴ Approve the following dosing regimens (A or B):

- A) 2 g/kg IV divided over 1 to 4 days; OR
- B) Up to 5.8 g/kg IV total dose (given in divided doses).

Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

32. Toxic Epidermal Necrolysis.⁷⁹ #

Criteria.⁷⁹ Approve for 5 days (to allow for one course of therapy either as a single dose or to be given in divided doses over 2 to 5 consecutive days) if the requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.⁸⁴ Approve the following dosing regimens (A or B):

- C) 2 g/kg IV divided over 1 to 4 days; OR
- D) Up to 5.8 g/kg IV total dose (given in divided doses).

Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

33. Scleromyxedema.⁷⁹ #

Criteria.⁷⁹ Approve for 6 months if the patient meets BOTH of the following (A and B):

- A) The patient has severe scleromyxedema; AND
- B) The requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.⁸⁵ 0.4 g/kg/day for 5 consecutive days every month. Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

34. Systemic Lupus Erythematosus.⁷⁹ #

Criteria.⁷⁹ Approve for 1 year if the patient meets ALL of the following (A, B, and C):

- A) The patient has severe systemic lupus erythematosus; AND
- B) The patient has failed to respond to, or does not tolerate, other treatments (e.g., corticosteroids, immunosuppressive agents); AND

- C) The requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.⁸² Approve doses up to 0.4 g/kg/day for 5 days every 4 weeks.
Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

35. Immune-Mediated Necrotizing Myopathy.[^]

Criteria. 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 and ii):

- i. Patient meets ONE of the following (a, b, c, or d):
 - a. Patient has tried a systemic corticosteroid; OR
 - b. Corticosteroids are contraindicated, according to the prescriber;^{IC-EC} OR
 - c. Patient has tried one of rituximab, methotrexate, mycophenolate, or tacrolimus;^{IC-ISGP} OR
 - d. Patient has anti-HMGCR autoantibodies;^{IC-EC} AND
- ii. The medication is prescribed by or in consultation with a neurologist or rheumatologist.<sup>IC-
ISGP</sup>

- B) Patient is Currently Receiving Immune Globulin. Approve for 1 year if the patient has responded to therapy, according to the prescriber.

Note: Examples of a response to therapy includes improved muscle strength, improved functional ability, CK decrease.

Dosing. Approve up to 2 g/kg per month administered intravenously (as a single dose or divided in smaller doses [e.g., 400 mg per kg daily for 5 days]).

36. Overlap Syndrome with Myositis (Including Anti-Synthetase Syndrome).^{79 #}

Criteria.⁷⁹ Approve for 1 year if the patient meets BOTH of the following (A and B):

- A) The patient's condition is resistant to treatment with glucocorticosteroids and immunosuppressants; AND
- B) The requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.^{86, 87} Approve the following dosing (A or B):

- A) Approve doses up to 2 g/kg administered monthly; OR
- B) Approve 1-2 g/kg per treatment cycle every 3 to 6 weeks (up to every 8 weeks), given in divided doses over 1-3 days.
Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

37. Inclusion Body Myositis.^{79 #}

Criteria.⁷⁹ Approve for 6 months if the patient meets ALL of the following (A, B and C):

- A) The patient has a severe form of inclusion body myositis with dysphagia; AND
- B) The patient's condition is otherwise treatment-resistant; AND
- C) The requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.⁸⁷ Approve the following dosing: Approve 1-2 g/kg every 6 to 8 weeks.
Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

38. Neuromyelitis Optica (Devic Syndrome).[^]

Criteria. 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. The patient has had severe relapses; AND
- b. The patient is not responding to corticosteroids; AND
- c. The patient is not a candidate for plasma exchange; AND
- d. The medication is prescribed by or in consultation with a neurologist. IC-ISGP

B) Patient is Currently Receiving Immune Globulin. Approve for 1 year if the patient has responded to therapy, according to the prescriber. IC-ISGP

Note: Examples of a response to therapy includes reduction in relapse rate, reduction in symptoms, slowing in the progression of symptoms.

Dosing. Approve up to 2 g/kg per month administered intravenously (as a single dose or divided in smaller doses [e.g., 400 mg per kg daily for 5 days]).

39. Thyroid Eye Disease (Grave's Disease).^{79 #}

Criteria.⁷⁹ Approve for 1 year if the patient meets ALL of the following (A and B):

- A)** The patient has failed treatment with, or has a contraindication to, teprotumumab; AND
- B)** The requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.⁸⁹ Approve the following dosing: Approve 2 g/kg given intravenously every 3 weeks.
Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

40. Treatment of Autoimmune Encephalitis.^{79 #}

Criteria.⁷⁹ Approve for 1 year if the patient meets ALL of the following (A, B and C):

- A)** The patient has failed to respond to, or does not tolerate, other treatments; AND
- B)** Infection has been ruled out; AND
- C)** The requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing.⁹⁰ Approve the following dosing: Approve 2 g/kg given intravenously over 2 to 5 days every 4 weeks.

Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

41. Treatment of Susac Syndrome.^{79 #}

Criteria.⁷⁹ Approve for 1 year if the patient meets ALL of the following (A and B):

- A) The requested medication is being used in combination with high-dose intravenous corticosteroids; AND
- B) The requested medication is being prescribed within the scope of practice of the provider's professional licensure.

Dosing. Approve the following dosing: Approve up to 2 g/kg given intravenously over 2 to 5 days every 4 weeks.

Since data is limited, other dosing regimens can be reviewed on a case-by-case basis.

42. Myelin Oligodendrocyte Glycoprotein Antibody-Associated Disease (MOGAD). [®]

Criteria. 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):
 - i. Patient has a clinical demyelinating event, according to the prescriber; AND
Note: Examples of a clinical demyelinating event includes, but is not limited to, optic neuritis, acute disseminated encephalomyelitis, transverse myelitis.
 - ii. The diagnosis was confirmed by a positive blood serum test which was positive for myelin oligodendrocyte glycoprotein (MOG)-Immune globulin G (IgG); AND
Note: Detection in cerebral spinal fluid would also satisfy this requirement.
 - iii. Patient meets ONE of the following (a or b):
 - a) Patient is using the requested medication for the treatment of acute attacks AND meets ONE of the following [(1) or (2)]:
 - (1) Patient has tried a systemic corticosteroid; OR
 - (2) Corticosteroids are contraindicated, according to the prescriber; OR
 - b) Patient is using the requested medication for attack prevention AND meets ONE of the following [(1) or (2)]:
 - (1) Patient has tried an immunosuppressant; OR
 - (2) Immunosuppressants are contraindicated, according to the prescriber; AND
 - iv. The medication is prescribed by or in consultation with a neurologist; OR
- B) Patient is Currently Receiving Immune Globulin. Approve for 1 year if the patient has responded to therapy, according to the prescriber.
Note: Examples of a response to therapy includes a reduction in relapse rate, slowing of disability, slowing in the progression of symptoms.

Dosing. Approve up to 2 g/kg per month administered intravenously (as a single dose or divided in smaller doses [e.g., 400 mg per kg daily for 5 days]).

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of immune globulin intravenous is not recommended in the following situations:

1. **Adrenoleukodystrophy.** Evidence does not support IVIG use.¹⁸
 2. **Amyotrophic Lateral Sclerosis.** There is insufficient evidence to recommend IVIG.¹⁸
 3. **Polyneuropathy, Organomegaly, Endocrinopathy, Monoclonal Gammopathy, and Skin Changes (POEMS) Syndrome.** Evidence does not support IVIG use.¹⁸
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- 4. Polyneuropathy Associated with IgM Monoclonal Gammopathy.⁷⁹**
- 5. Idiopathic Neuropathies.⁷⁹**
- 6. Brachial Plexopathy.⁷⁹**
- 7. Critical Illness Polyneuropathy.⁷⁹**
- 8. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.**

SOURCES OF INFORMATION

1. Bivigam® 10% intravenous solution [prescribing information]. Boca Raton, FL: ADMA Biologics; March 2024.
2. Murrell D, Pena S, Joly P, et al. Diagnosis and management of pemphigus: Recommendations of an international panel of experts. *J Am Acad Dermatol.* 2020;82(3):575-585.
3. Flebogamma® 5% DIF intravenous solution [prescribing information]. Los Angeles, CA: Grifols; August 2024.
4. American College of Obstetricians and Gynecologists Practice Advisory. Management of obstetric-gynecologic patients during a measles outbreak. March 2024. Available at: www.acog.com. Accessed on 10/30/2024.
5. Gammagard® Liquid 10% solution [prescribing information]. Lexington, MA: Takeda; January 2024.
6. Gammagard® S/D IgA < 1 mcg/mL in a 5% intravenous solution [prescribing information]. Lexington, MA: Takeda; March 2023.
7. Gammakem™ 10% solution [prescribing information]. Fort Lee, NJ: Kedrion; January 2020.
8. Gammoplex® 5% intravenous solution [prescribing information]. Fort Lee, NJ: Kedrion; May 2024.
9. Gamunex®-C 10% solution [prescribing information]. Research Triangle Park, NJ: Grifols; January 2020.
10. Octagam® 5% intravenous solution [prescribing information]. Paramus, NJ: Octapharma; April 2022.
11. Octagam® 10% intravenous solution [prescribing information]. Paramus, NJ: Octapharma; April 2022.
12. Privigen® 10% intravenous solution [prescribing information]. Kankakee, IL: CSL Behring; March 2022.
13. McLean HQ, Fiebelkorn AP, Temte JL, Wallace GS; Centers for Disease Control and Prevention. Prevention of measles, rubella, congenital rubella syndrome, and mumps, 2013: summary recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep.* 2013;62:1-34.
14. Bonilla FA, Khan DA, Ballas ZK, et al. Practice parameter for the diagnosis and management of primary immunodeficiency. *J Allergy Clin Immunol.* 2015;136(5):1186-205.
15. Panzyga 10% intravenous solution [prescribing information]. New York; NY: Pfizer; February 2021.
16. Asceniv 10% intravenous solution [prescribing information]. Boca Raton, FL: ADMA Biologics; April 2019.
17. Bonilla FA, Barlan I, Chapel H, et al. International Consensus Document (ICON): Common variable immunodeficiency disorders. *J Allergy Clin Immunol Pract.* 2016;4(1):38-59.
18. Perez EE, Orange JS, Bonilla F, et al. Update on the use of immunoglobulin in human disease: A review of evidence. *J Allergy Clin Immunol.* 2017;139(3S):S1-S46.
19. Wasserman RL, Lumry W, Harris J, et al. Efficacy, safety, and pharmacokinetics of a new 10% liquid intravenous immunoglobulin containing high titer neutralizing antibody to RSV and other respiratory viruses in subjects with primary immunodeficiency disease. *J Clin Immunol.* 2016;36:590-599.
20. Otani S, Davis AK, Cantwell L, et al. Evolving experience of treating antibody-mediated rejection following lung transplantation. *Transpl Immunol.* 2014;31(2):75-80.
21. The NCCN Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma Clinical Practice Guidelines in Oncology (version 1.2025 – October 1, 2024). © 2024 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on October 17, 2024.
22. Anderson D, Ali K, Blanchette V, et al. Guidelines on the use of intravenous immune globulin for hematologic conditions. *Transfus Med Rev.* 2007;21(2 Suppl 1):s9-56.
23. Neunert C, Terrell DR, Arnold DM, et al. American Society of Hematology 2019 guidelines for immune thrombocytopenia. *Blood Adv.* 2019;3(23):3829-3866.
24. Neunert C, Lim W, Crowther M, et al. The American Society of Hematology 2011 evidenced-based practice guideline for immune thrombocytopenia. *Blood.* 2011;117:4190-4207.
25. Gammoplex 10% intravenous solution [prescribing information]. Fort Lee, NJ: Kedrion; May 2024.
26. American Academy of Pediatrics. Kawasaki disease. In: Kimberlin DW, Banerjee R, Barnett ED, , eds. Red Book; 2024 Report of the Committee on Infectious Diseases, 33rd Ed. American Academy of Pediatrics; 2024:522-529.
27. UK National Health Service. Commissioning position (2024). [Clinical Commissioning Policy for the use of therapeutic immunoglobulin \(Ig\) England \(2024\)](http://Clinical Commissioning Policy for the use of therapeutic immunoglobulin (Ig) England (2024)). Accessed on October 17, 2024.

28. Ahmed AR. Use of intravenous immunoglobulin therapy in autoimmune blistering diseases. *Int Immunopharmacol.* 2006;6(4):557-578.
29. Enk A, Hadaschik E, Eming R, et al. European guidelines on the use of high-dose intravenous immunoglobulin in dermatology. *J Dtsch Dermatol Ges.* 2017;15(2):228-241.
30. Gurean HM, Jeph S, Ahmed AR. Intravenous immunoglobulin therapy in autoimmune mucocutaneous blistering diseases: a review of the evidence for its efficacy and safety. *Am J Clin Dermatol.* 2010;11:315-326.
31. The NCCN Prevention and Treatment of Cancer-Related Infections Clinical Practice Guidelines in Oncology (version 3.2024 – September 23, 2024). © 2024 National Comprehensive Cancer Network. Available at <http://www.nccn.org>. Accessed on October 17, 2024.
32. Glisson CC. UpToDate® 2024. Neuromyelitis optica spectrum disorder (NMOSD): Clinical features and diagnosis. Available at: www.uptodate.com. Accessed on October 30, 2024.
33. Aggarwal R, Charles-Schoeman C, Schessl J, et al. Prospective, double-blind, randomized, placebo-controlled, phase III study evaluating efficacy and safety of Octagam 10% in patients with dermatomyositis (ProDERM Study). *Medicine* (Baltimore). 2021;100(1):e23677.
34. Marfo K, Lu A, Ling M, Akalin E. Desensitization protocols and their outcome. *Clin J Am Soc Nephrol.* 2011;6:922-936.
35. Zachary AA, Leffell MS. Desensitization for solid organ and hematopoietic stem cell transplantation. *Immunol Rev.* 2014;258:183-207.
36. Colvin MM, Cook JL, Chang P, et al; American Heart Association Heart Failure and Transplantation Committee of the Council on Clinical Cardiology; American Heart Association Heart Failure and Transplantation Committee of the Council on Cardiopulmonary Critical Care, Perioperative and Resuscitation, et al. Antibody-mediated rejection in cardiac transplantation emerging knowledge in diagnosis and management: a scientific statement from the American Heart Association. *Circulation.* 2015;131:1608-1639.
37. Hughes RA, Wijdicks EF, Barohn R, et al. Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: immunotherapy for Guillain-Barre syndrome: report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology.* 2003;61:736-740. Guideline Reaffirmed January 22, 2022.
38. Van Doorn PA, Van den Bergh PYK, Hadden RDM, et al. European Academy of Neurology/Peripheral Nerve Society guideline on diagnosis and treatment of Guillain-Barre syndrome. *Eur J Neurol.* 2023;30(12):3646-3674.
39. Tomblyn M, Chiller T, Einsele H, et al; Center for International Blood and Marrow Research; National Marrow Donor program; European Blood and Marrow Transplant Group; American Society of Blood and Marrow Transplantation; Canadian Blood and Marrow Transplant Group; Infectious Diseases Society of America; Society for Healthcare Epidemiology of America; Association of Medical Microbiology and Infectious Disease Canada; Centers for Disease Control and Prevention. Guidelines for preventing infectious complications among hematopoietic cell transplantation recipients: A global perspective. *Biol Blood Marrow Transplant.* 2009;1:1143-1238.
40. Panel on Opportunistic Infections in Children with and Exposed to HIV. Guidelines for the prevention and treatment of opportunistic infections in children with and exposed to HIV. Department of Health and Human Services. Last review July 3, 2024. Available at: [Guidelines for the Prevention and Treatment of Opportunistic Infections in HIV-Exposed and HIV-Infected Children](http://www.hrsa.gov/omnia/2024/2024-07-03-001.html). Accessed on October 17, 2024.
41. American Academy of Pediatrics. Human Immunodeficiency Virus Infection. In: Kimberlin DW, Banerjee R, Barnett ED, eds. Red Book®: 2024 Report of the Committee on Infectious Diseases, 33rd Ed. American Academy of Pediatrics; 2024:489-503.
42. The NCCN Multiple Myeloma Clinical Practice Guidelines in Oncology (version 1.2025 – September 17, 2024). © 2024 National Comprehensive Cancer Network. Available at <http://www.nccn.org>. Accessed on October 17, 2024.
43. National Multiple Sclerosis Society. Relapse management. Available at: <http://www.nationalmssociety.org/For-Professionals/Clinical-Care/Managing-MS/Relapse-Management>. Accessed on October 17, 2024.
44. Hachem RR, Yusen RD, Meyers BF, et al. Anti-human leukocyte antigen antibodies and preemptive antibody-directed therapy after lung transplantation. *J Heart Lung Transplant.* 2010;29:973.
45. Lejeune A, Martin L, Santibanez S, et al. Postexposure prophylaxis with intravenous immunoglobulin G prevents infants from getting measles. *Acta Paediatr.* 2017;1066(1):174-177.
46. American Academy of Pediatrics. Varicella-Zoster Infections. In: Kimberlin DW, Banerjee R, Barnett ED, eds. Red Book®: 2024 Report of the Committee on Infectious Diseases, 33rd Ed. American Academy of Pediatrics; 2024:938-951.
47. VariZIG® for intramuscular injection [prescribing information]. Roswell, GA: Saol Therapeutics; September 2021.
48. Centers for Disease Control and Prevention. Tetanus. Available at: [Clinical Care of Tetanus | Tetanus | CDC](http://www.cdc.gov/tetanus). Accessed on October 17, 2024.
49. Broliden K, Tolphyenstam T, Norbeck O. Clinical aspects of parvovirus B19 infection. *J Intern Med.* 2006;260:285-304.
50. Symington A, Paes B. Fetal and neonatal alloimmune thrombocytopenia: harvesting the evidence to develop a clinical approach to management. *Am J Perinatal.* 2011;28:137-144.
51. Townsley DM. Hematologic complications of pregnancy. *Semin Hematol.* 2013;50:222-231.
52. Kumpfel T, Giglhuber K, Aktas O, et al. Update on the diagnosis and treatment of neuromyelitis optica spectrum disorders (NMOSD) – revised recommendations of the Neuromyelitis Optica Study Group (NEMOS). Part II: Attack therapy and long-term management. *J Neurol.* 2024;271:141-176.
53. Yimmugo® 10% intravenous solution [prescribing information]. Dreieich, Germany. Biotest (Grifols); June 2024.

54. From the Global Strategy for Asthma Management and Prevention, Global Initiative for Asthma (GINA) 2024. Available at: <https://ginasthma.org/>. Accessed on October 17, 2024.
55. Eichenfield LF, Ahluwalia J, Waldman A, et al. Current guidelines for the evaluation and management of atopic dermatitis: A comparison of the Joint Task Force Practice Parameter and American Academy of Dermatology Guidelines. *J Allergy Clin Immunol.* 2017;139(4S):S49-S57.
56. Allenbach Y, Mammen AL, Benveniste O, et al. 224th ENMC International Workshop: Clinico-sero-pathological classification of immune-mediated necrotizing myopathies. Zandvoort, The Netherlands, 14-16 October 2016. *Neuromuscul Disord.* 2018;28(1):87-99.
57. Goebel A, Baranowski A, Maurer K, et al. Intravenous immunoglobulin treatment of the complex regional pain syndrome: A randomized trial. *Ann Intern Med.* 2010;152:152-158.
58. Goebel A, Bisla J, Carganillo R, et al. Low-dose intravenous immunoglobulin treatment for long-standing complex regional pain syndrome: A randomized trial. *Ann Intern Med.* 2017;167(7):476-483.
59. Chrissafidou A, Malek M, Musch E. Experimental study on the use of intravenous immunoglobulin in patients with steroid-resistant Crohn's disease. *Gastroenterol.* 2007;45:605-608.
60. Balfour-Lynn IM, Mohan U, Bush A, Rosenthal M. Intravenous immunoglobulin for cystic fibrosis lung disease: a case series of 16 children. *Arch Dis Child.* 2004;89:315-319.
61. Relkin NR, Thomas RG, Rissman RA, et al. A phase 3 trial of IV immunoglobulin for Alzheimer disease. *Neurology.* 2017;88(18):1768-1775.
62. Christopher-Stine L. UpToDate® 2024. Clinical manifestations and diagnosis of immune-mediated necrotizing myopathy and Treatment of immune-mediated necrotizing myopathy. Available at: www.uptodate.com. Accessed on October 30, 2024.
63. Tavee J, Brannagan TH, Lenihan MW, et al. Updated consensus statement: Intravenous immunoglobulin in the treatment of neuromuscular disorders report of the AANEM ad hoc committee. *Muscle Nerve.* 2023;68(4):356-374.
64. Caro XJ, Winter EF, Dumas AJ. A subset of fibromyalgia patients have findings suggestive of chronic inflammatory demyelinating polyneuropathy and appear to respond to IVIG. *Rheumatology (Oxford).* 2008;47:208-211.
65. Sanders DB, Wolfe GI, Benatar M, et al. International consensus guidance for management of myasthenia gravis: Executive summary. *Neurology.* 2016;87(4):419-425.
66. Eid AJ, Ardura MI, AST Infectious Disease Community of Practice. Human parvovirus B19 in solid organ transplantation: Guidelines from the American Society of Transplantation Infectious Diseases Community of Practice. *Clin Transplant.* 2019 Sep;33(9):e13535.
67. Van den Bergh PY, van Doorn PA, Hadden RD, et al. European Academy of Neurology/Peripheral Nerve Society guideline on diagnosis and treatment of chronic inflammatory demyelinating polyradiculoneuropathy: Report of a joint Task Force – Second revision. *J Peripher Nerv Syst.* 2021 Sep;26(3):242-268.
68. Practice Committee of the American Society for Reproductive Medicine. The role of immunotherapy in in vitro fertilization: a guideline. *Fertil Steril.* 2018;110:387-400.
69. Banwell B, Bennett JL, Marignier R, et al. Diagnosis of myelin oligodendrocyte glycoprotein antibody-associated disease: International MOGAD Panel proposed criteria. *Lancet Neurol.* 2023;22:268-282.
70. Sechi E, Cacciaguerra L, Chen JJ, et al. Myelin Oligodendrocyte Glycoprotein Antibody-Associated Disease (MOGAD): A review of clinical and MRI features, diagnosis, and management. *Front Neurol.* 2022;13:885218.
71. Mccheik S, Peramo B, Quenby S, et al. ESHRE guideline: recurrent pregnancy loss: an update in 2022. *Hum Reprod Open.* 2023(1): hoad002. doi: 10.1093/hropen/hoad002.
72. The Practice Committee of the American Society for Reproductive Medicine. Evaluation and treatment of recurrent pregnancy loss: a committee opinion. *Fertil Steril.* 2012;95:1103-1111.
73. The NCCN Management of Immunotherapy-Related Toxicities Clinical Practice Guidelines in Oncology (version 2.2024 – October 25, 2024). © 2024 National Comprehensive Cancer Network. Available at: <http://www.nccn.org>. Accessed on November 12, 2024.
74. Schneider BJ, Naidoo J, Santomasso BD, et al. Management of immune-related adverse events in patients treated with immune checkpoint inhibitor therapy: American Society of Clinical Oncology guideline update. *J Clin Oncol.* 2021;39(36):4073-4126.
75. Garces JC, Biusti S, Giusti S, et al. Antibody-mediated rejection: A review. *Ochsner J.* 2017;17(1):46-55.
76. Wan SS, Yin TD, Wyburn K, et al. The treatment of antibody-mediated rejection in kidney transplantation: An updated systematic review and meta-analysis. *Transplantation.* 2018;102(4):557-568.
77. Kidney Disease: Improving Global Outcomes (KDIGO) Transplant Work Group. KDIGO clinical practice guideline for the care of kidney transplant recipients. *Am J Transplant.* 2009;9(Suppl 3):S1.
78. Witt CA, Gaut JP, Yusen RD, et al. Acute antibody-mediated rejection after lung transplantation. *J Heart Lung Transplant.* 2013;32:1034.
79. Centers for Medicare and Medicaid Services. Novitas Solutions, Inc. Local Coverage Determination (LCD): Immune Globulin (L35093) [Original effective date: 10/01/2015; Revision effective date: 2/5/2023]. Accessed on June 3, 2025.
80. Centers for Medicare and Medicaid Services. Novitas Solutions, Inc. Local Coverage Article: Billing and Coding: Immune Globulin (A56786) [Original effective date: 10/03/2018; Revision effective date: 1/1/2025]. Accessed on June 3, 2025.

81. Centers for Medicare and Medicaid Services. National Coverage Determination (NCD) for Intravenous Immune Globulin for the Treatment of Autoimmune Mucocutaneous Blistering Diseases (250.3). Version Number 1. [Original effective date: 10/01/2002; Revision effective date: 03/2025]. Accessed on June 3, 2025.
82. Micromedex®. IBM Corporation. Available at: <http://www.micromedexsolutions.com> Accessed on April 14, 2020. Search terms: IVIG.
83. Pineton de Chambrun M, Gousseff M, Mauhin W, et al. Intravenous Immunoglobulins Improve Survival in Monoclonal Gammopathy-Associated Systemic Capillary-Leak Syndrome. *Am J Med.* 2017 Oct;130(10):1219.e19-1219.e27.
84. Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2010. Available at: <http://www.clinicalpharmacology-ip.com/Default.aspx>. Accessed on April 14, 2020. Search terms: IVIG.
85. Dolenc-Voljč M, Jurčić V, Hočevar A, Tomšič M. Scleromyxedema with subcutaneous nodules: successful treatment with thalidomide and intravenous immunoglobulin. *Case Rep Dermatol.* 2013;5(3):309–315. Published 2013 Nov 2. doi:10.1159/000356469
86. Weeding E, Tiniakou E. Therapeutic management of immune-mediated necrotizing myositis. *Curr Treatm Opt Rheumatol.* 2021 Jun;7(2):150-160. doi: 10.1007/s40674-021-00174-1. Epub 2021 Mar 29. PMID: 34422547; PMCID: PMC8378663.
87. Schmidt, J. Current Classification and Management of Inflammatory Myopathies. *J Neuromuscul Dis.* 2018;109-129. doi:10.3233/JND-180308.
88. Magraner MJ, Coret F, Casanova B. The effect of intravenous immunoglobulin on neuromyelitis optica. *Neurologia.* 2013 Mar;28(2):65-72. English, Spanish. doi: 10.1016/j.nrl.2012.03.014. Epub 2012 Jul 28. PMID: 22841880.
89. Perez EE, Orange JS, Bonilla F, et al. Update on the use of immunoglobulin in human disease: A review of evidence. *J Allergy Clin Immunol.* 2017;139:S1-S46. doi:10.1016/j.jaci.2016.09.023.
90. Abboud H, Probasco JC, Irani S, Ances B, Benavides DR, Bradshaw M, Christo PP, Dale RC, Fernandez-Fournier M, Flanagan EP, Gadoth A, George P, Grebenciucova E, Jammoul A, Lee ST, Li Y, Matiello M, Morse AM, Rae-Grant A, Rojas G, Rossman I, Schmitt S, Venkatesan A, Vernino S, Pittock SJ, Titulaer MJ; Autoimmune Encephalitis Alliance Clinicians Network. Autoimmune encephalitis: proposed best practice recommendations for diagnosis and acute management. *J Neurol Neurosurg Psychiatry.* 2021 Jul;92(7):757-768. doi: 10.1136/jnnp-2020-325300. Epub 2021 Mar 1. PMID: 33649022; PMCID: PMC8223680.
91. Ma Y, Man J, Niu J, et al. Progress of research on human parovirus B19 infection after renal transplantation. *Transplant Rev.* 2022;36(4):100730.
92. Alyglo™ 10% intravenous solution [prescribing information]. Teaneck, NJ: GC Biopharma; December 2023.

HISTORY

Type of Revision	Summary of Changes	Date
Policy created	New Medicare Advantage Medical Policy	04/29/2020
Policy Revision	<p>Primary Immunodeficiencies (PID): In Initial Therapy, the wording of “or another confirmed primary immunodeficiency” was added. For Continuation Therapy, the examples of benefits from the product were moved to a Note and the wording “according to the prescriber” was added. In Dosing, the examples of clinical response were removed. In Dosing related to patients with primary immunodeficiency and exposure to measles, the wording of “previous exposure or risk of future measles exposure” was added. The specific measles dosing regimens were removed and the wording that the minimum dose has been determined by the prescriber was added.</p> <p>B-Cell Chronic Lymphocytic Leukemia for Prevention of Bacterial Infections: Added “having a positive response to therapy according to the prescriber” and placed current examples of a positive response as a note.</p> <p>Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) or Polyradiculoneuropathy: For Continuation Therapy, moved examples of a clinically significant improvement to a note. Removed a neurologist or in consultation with a neurologist for continuation criteria.</p> <p>Idiopathic (Immune) Thrombocytopenic Purpura (ITP) or Immune Thrombocytopenia [IT] Acute and Chronic was updated to Immune</p>	9/11/2020

	<p>Thrombocytopenia (ITP). The following note was added: The diagnosis of Immune Thrombocytopenia (ITP) encompasses previous nomenclature, such as Idiopathic Thrombocytopenia, Idiopathic Thrombocytopenic Purpura, Immune Thrombocytopenic Purpura. In Initial Therapy for adults \geq 18 years of age (previously $>$ 17 years of age), criteria were updated to require the patient try a systemic corticosteroid, or there is an urgent need to increase platelet count quickly, or to allow if a systemic corticosteroid is contraindicated according to the prescriber. Previous criteria that separated out adults and children with acute bleeding and those with persistent or chronic disease were removed. Previous criteria of specifying platelet counts for adults with acute bleeding, persistent or chronic disease, and to increase platelet counts prior to surgery were removed. The requirement for adults that a corticosteroid be started with immune globulin if there is an urgent need to increase the platelet count quickly was removed. In Initial Therapy for children and adolescents ($<$ 18 years of age) [previously \leq 17 years of age], to increase platelet counts before surgical procedures, and pregnant patients, the criteria were updated to only include a requirement for the prescriber's specialty. Previous criteria that addressed children and adolescents with inaccessibility issues, activity level, and noncompliance were removed. The specific wording regarding pregnant patients, including "before normal vaginal delivery, cesarean section, or spinal or epidural anesthesia" and "pregnant patient in any trimester" was removed and replaced with the general term of "pregnant patients". The duration of approval was updated from 2 weeks and 3 months, per the respective classifications, to 6 months for any pregnant patient. For Continuation Therapy, a requirement was added that the patient has responded to therapy according to the prescriber; and the examples of responding to therapy were moved to a Note. In Dosing, specific dosing regimens were removed. The wording of "up to" 1 g per kg on 2 consecutive days, "up to" 0.4 g per kg on 5 consecutive days (up to a total of 2 g per kg per treatment course), and the dose and interval between doses has been adjusted according to the platelet count and/or to prevent significant bleeding "as determined by the prescriber" was added.</p> <p>Kawasaki Disease: The criteria were updated from approval of a single dose to an approval duration of 3 months. The criterion that the patient had signs and symptoms required for a second dose of immune globulin was removed since the intent of the criteria assumed the patient was given a first dose of the product in the hospital. In Dosing, the wording of "up to" and "as a single dose or over multiple consecutive days" and "the dose may be repeated if needed" was added. Also, the references to length of infusion and to signs of fever or inflammation were removed.</p> <p>Multifocal Motor Neuropathy (MMN). For Continuation Therapy, moved examples of a clinically significant improvement to a note. Removed a neurologist or in consultation with a neurologist for continuation criteria.</p> <p>Antibody-Mediated Rejection (ABMR) in Solid Organ Transplantation (e.g., Kidney, Heart, Lung, Liver) was updated to Antibody-Mediated Rejection (ABMR) in Transplantation. In Dosing, the reference to case-by-case review was removed. Also, an addition of criterion was added as up to 2 g per kg as an intravenous infusion (as a single dose or divided in smaller doses) OR based on a transplant center's protocol.</p>	
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	<p>Autoimmune Mucocutaneous Blistering Diseases. In the initial therapy criteria, examples of immunosuppressive agents were updated to notes. In the continuation criteria, examples of response to therapy were updated to notes.</p> <p>Cytomegalovirus (CMV) Interstitial Pneumonia in Patients with Cancer or Transplant-Related Infection was updated to Cytomegalovirus (CMV) Pneumonia in Patients with Cancer or Transplant-Related Infection.</p> <p>Dermatomyositis or Polymyositis. In the initial therapy criteria, examples of immunosuppressive agents were updated to notes. In the continuation criteria, examples of response to therapy were updated to notes.</p> <p>Desensitization Therapy Prior to and Immediately after Solid Organ (Kidney, Heart, Lung, Liver, Intestinal) Transplantation was updated to Desensitization Therapy Prior to and Immediately after Transplantation. In Continuation Therapy, the criterion regarding the timing of administration was removed. Criteria was updated to approve for 1 year if the product is prescribed by or in consultation with a physician affiliated with a transplant center.</p> <p>Guillain Barre Syndrome (GBS). Neuropathic symptoms were moved from criterion to a note.</p> <p>Hematologic Neoplasm-Associated Hypogammaglobulinemia or Hypogammaglobulinemia after B-cell Targeted Therapies (Secondary Immunodeficiency [SID]). Added IgG level in units of g/L. Continuation criteria: updated wording to having a positive response to therapy according to the prescriber and moved examples of a positive response to a note. In Dosing, the reference to case-by-case review was removed. Dosing was updated as 0.4 to 0.5 g per kg to 0.4 to 0.6 g per kg. Also, the criterion was added as 0.2 to 0.8 g per kg once every 3 to 4 weeks and dosing adjusted based on clinical response as determined by the prescriber.</p> <p>Hematopoietic Cell Transplantation (HCT) to Prevent Bacterial Infection. Added IgG level in units of g/L. Continuation criteria: updated wording to having a positive response to therapy according to the prescriber and moved examples of a positive response to a note. In Dosing, the following criterion was added: The immune globulin dosage is based on a transplant center's protocol.</p> <p>Human Immunodeficiency Virus (HIV)-Associated Thrombocytopenia. Dosing section- added "up to" to both dosing criteria.</p> <p>Human Immunodeficiency Virus (HIV)-Infected Infants and Children to Prevent Recurrent Bacterial Infections. Added IgG level in units of g/L. Dosing criteria- removed "between infusions" and added a note of examples of adjusting the dose according to clinical effectiveness.</p> <p>Immunotherapy-Related Toxicities Associated with Checkpoint Inhibitor Therapy. Initial therapy criteria- moved examples of systemic corticosteroid therapy to a note. Dosing criteria: Added "up to" and "as an IV infusion" wording. Added criterion regarding the dose and interval between doses has been adjusted based on clinical response as determined by the prescriber.</p>	
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	<p>Lambert-Eaton Myasthenic Syndrome (LEMS). Continuation criteria-moved examples of a response to therapy to a note. In Dosing, the wording “up to” was added.</p> <p>Dosing criteria- added the wording “up to” on criteria A).</p> <p>Myasthenia Gravis. Moved examples of immunosuppressive drugs to notes. Dosing criteria- added criterion regarding the dose and interval between doses has been adjusted based on clinical response as determined by the prescriber. Also added the wording “up to”.</p> <p>Passive Immunization for Measles (Post-Exposure Prophylaxis). Moved examples of severe immunocompromised status into a note.</p> <p>Pure Red Blood Cell Aplasia (PRCA) Secondary to Chronic [Persistent] Parvovirus B19. Moved examples of chronic immunodeficiency conditions to a note.</p> <p>Stiff-Person Syndrome (Moersch-Woltman Syndrome). Continuation therapy – moved examples of response to therapy to a note.</p> <p>Thrombocytopenia, Feto-neonatal Alloimmune. In Dosing, the reference to case-by-case review was removed. The option for neonatal being dosed by the prescriber was added.</p> <p>For continuation criteria, removed the wording “intravenous.”</p>	
Policy revision	<p>Removed Carimune from the policy (obsolete).</p> <p>B-Cell Chronic Lymphocytic Leukemia for Prevention of Infections: The descriptor of “bacterial” was removed from the condition of approval. Additionally, the descriptor of “bacterial” was removed from the criterion regarding recurrent infections. The Dosing was updated to be: “greater than 500 mg/dL” (previously was “about 500 mg/dL and up to 700 mg/dL”).</p> <p>Dermatomyositis or Polymyositis: This indication was moved from “Other Uses with Supportive Evidence” to an FDA-approved indication. Prior to starting therapy, a requirement for an elevated kinase level, according to the prescriber, was added, unless other measures support the diagnosis, including, but not limited to, skin manifestations, autoantibody testing, muscle biopsy results, electromyographic findings. Dosing that referred to monthly use was updated to be once every 4 weeks.</p> <p>Multifocal Motor Neuropathy: The indication “Multifocal Motor Neuropathy (Treatment)” was changed as listed. A requirement was added that the diagnosis to be supported by weakness without sensory abnormalities, upper motor signs, or marked bulbar involvement. Additionally, a requirement was added for one of the following: the diagnosis is supported by nerve conduction studies that demonstrate motor conduction block or probable motor conduction block; the prescriber has determined the patient has multifocal motor neuropathy without conduction block; or the diagnosis is supported by a motor nerve biopsy or by a magnetic resonance imaging neurography.</p> <p>Autoimmune Mucocutaneous Blistering Diseases (Pemphigus Vulgaris, Pemphigus Foliaceus, Bullous Pemphigoid, Mucous Membrane Pemphigoid</p>	10/05/2021

	<p>[Cicatricial Pemphigoid], and Epidermolysis Bullosa Acquisita): In the Dosing, the word “initially” was removed (not needed).</p> <p>Hematologic Neoplasm-Associated Hypogammaglobulinemia or Hypogammaglobulinemia after B-cell Targeted Therapies (Secondary Immunodeficiency [SID]): Additional examples of chimeric antigen receptor T-cell therapy were added. The descriptor of “bacterial” was removed from the criterion regarding recurrent or severe infection.</p> <p>Hematopoietic Cell Transplantation to Prevent Infection: The indication “Hematopoietic Cell Transplantation to Prevent Bacterial Infection” was changed to as listed. Additionally, the descriptor of “bacterial” was removed from the criterion regarding frequent and/or severe infections. In Dosing, the phrase “greater than 400 to 500 mg per/dL” for serum IgG was updated to “greater than 400 mg/dL”.</p> <p>Human Immunodeficiency Virus-Associated Thrombocytopenia: For Dosing, the phrase “for platelet counts less than $20 \times 10^9/L$ or 20,000/μL to $30 \times 10^9/L$ or 30,000/μL per mm³ and this dose is repeated once weekly if needed” was changed to “up to once weekly.”</p> <p>Human Immunodeficiency Virus Infected Infants and Children to Prevent Recurrent Infections: The indication “Human Immunodeficiency Virus-Infected Infants and Children to Prevent Recurrent Bacterial Infections” was changed to as listed. Additionally, the word “bacterial” was removed from the criterion regarding recurrent, serious infections.</p> <p>Immunotherapy-Related Toxicities Associated with Checkpoint Inhibitor Therapy: Added additional examples of checkpoint inhibitors.</p> <p>Multiple Myeloma: The word “bacterial” was removed from the criterion regarding severe, recurrent infections.</p> <p>Multiple Sclerosis, Post-Partum to Prevent Relapses: This condition and related criteria were removed.</p> <p>Myasthenia Gravis: Approval criteria were clarified related to continuation of therapy in patients using immune globulin for short-term (acute) use. Examples of a response to therapy were added for continuation of treatment in patients receiving immune globulin for maintenance therapy. Dosing was changed to remove the wording “up to” for maintenance dosing.</p> <p>Passive Immunization for Measles (Post-Exposure Prophylaxis): The requirement that the medication be given within 6 days of exposure was removed. The word “severely” was removed from the criterion related to immunocompromised patients. A note regarding examples of severely immunocompromised patients was removed. In Dosing, the wording “as soon as possible after exposure” was removed.</p> <p>Passive Immunization for Varicella (Chickenpox) [Post-Exposure Prophylaxis]: The requirement that VarizIG is not available was updated to add “or it cannot be administered within 10 days of exposure”.</p>	
Policy revision	Human Immunodeficiency Virus (HIV) - or Hepatitis C-Associated Thrombocytopenia. The diagnosis Hepatitis C-Associated Thrombocytopenia	10/24/2022

	<p>was added to the policy. Criterion was updated from patient is receiving combination antiretroviral therapy to patient is receiving antiviral therapy. Criteria related to clinically significant bleeding complications according to the prescriber was removed.</p> <p>Multiple Myeloma. Added the wording, “or is at risk of” to the criterion related to severe recurrent infections according to the prescriber.</p> <p>Post-Exposure Prophylaxis for Varicella: The diagnosis wording was previously Passive Immunization for Varicella (Chickenpox) [Post-Exposure Prophylaxis]. The following criteria were removed: 1) Patient has HIV; Patient is immune compromised; Patient is pregnant; 2) Patient does not have evidence of immunity to varicella. Also, Treatment or Post-Exposure Prophylaxis for Tetanus was added to the diagnosis with the following criterion: Tetanus Immune globulin is not available. Dosage of 0.2 to 0.4 g/kg intravenously one time was added.</p> <p>Parvovirus B19 Infection: Diagnosis wording was previously Pure Red Blood Cell Aplasia (PRCA) Secondary to Chronic (Persistent) Parvovirus B19 Infection. The word “chronic” immunodeficiency condition was removed from initial therapy criteria. The criterion regarding “clinically significant anemia as determined by the prescriber” and “patient is transfusion dependent” was removed. Continuation of therapy criteria related to hemoglobin and relapse were removed from the criteria. Removed “(one course) for up to two courses” from the dosage 2g/kg given intravenously over a period of 2 to 5 consecutive days.</p>	
Policy revision	<p>Added prescriber specialty requirement for Primary Immunodeficiencies, B-Cell Chronic Lymphocytic Leukemia for Prevention of Infections, Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) or Polyradiculoneuropathy, Dermatomyositis or Polymyositis, Immune Thrombocytopenia (ITP), Kawasaki Disease, Multifocal Motor Neuropathy, Antibody-Mediated Rejection in Transplantation, Autoimmune Mucocutaneous Blistering Diseases (Pemphigus Vulgaris, Pemphigus Foliaceus, Bullous Pemphigoid, Mucous Membrane Pemphigoid [Cicatricial Pemphigoid], and Epidermolysis Bullosa Acquisita), Cytomegalovirus Pneumonia in a Patients with Cancer or Transplant-Related Infection, Desensitization Therapy Prior to and Immediately after Transplantation, Guillain Barre Syndrome, Hematologic Neoplasm-Associated Hypogammaglobulinemia or Hypogammaglobulinemia after B-cell Targeted Therapies (Secondary Immunodeficiency [SID]), Hematopoietic Cell Transplantation (HCT) to Prevent Infection, Human Immunodeficiency Virus (HIV)- or Hepatitis C-Associated Thrombocytopenia, Human Immunodeficiency Virus (HIV), to Prevent Recurrent Infections, Lambert-Eaton Myasthenic Syndrome (LEMS), Multiple Myeloma, Multiple Sclerosis (MS), Acute Severe Exacerbation or Relapses, Myasthenia Gravis, Parvovirus B19 Infection, Pure Red Blood Cell Aplasia (PRCA), Immunologic Subtype, Stiff-Person Syndrome (Moersch-Woltman Syndrome), Thrombocytopenia, Feto-neonatal Alloimmune.</p> <p>Primary Immunodeficiencies - for patients with common variable immunodeficiency (CVID), unspecified hypogammaglobulinemia, or other immunodeficiencies with significant hypogammaglobulinemia or IgG subclass deficiency, selective antibody deficiency (SAD), or another confirmed primary immunodeficiency - for criteria requiring the patient have recurrent infections or at least one bacterial infection directly attributable to the immunodeficiency,</p>	08/02/2023

	<p>removed "at least one bacterial infection directly attributable to the immunodeficiency"</p> <p>*Removed the following indications from the policy - Bone Marrow Transplant.</p> <p>*Added the following indications to the policy - Hematopoietic Stem Cell Transplant, Treatment of Hypogammaglobulinemia Secondary to Solid Organ Transplant, Immune-Mediated Necrotizing Myopathy, Overlap Syndrome with Myositis (Including Anti-Synthetase Syndrome), Inclusion Body Myositis, Neuromyelitis Optica (Devic Syndrome), Thyroid Eye Disease (Grave's Disease), Treatment of Autoimmune Encephalitis, Treatment of Susac Syndrome.</p> <p>*Added the following indications to the Conditions NOT Recommended for Approval - Adrenoleukodystrophy, Amyotrophic Lateral Sclerosis, Polyneuropathy, Organomegaly, Endocrinopathy, Monoclonal Gammopathy, and Skin Changes (POEMS) Syndrome, Polyneuropathy Associated with IgM Monoclonal Gammopathy, Idiopathic Neuropathies, Brachial Plexopathy, Critical Illness Polyneuropathy.</p> <p>Human Immunodeficiency Virus (HIV), to Prevent Recurrent Infections - added requirement that patient is receiving combination antiretroviral therapy.</p> <p>Lambert-Eaton Myasthenic Syndrome (LEMS) - added exception for patients intolerant of alternative treatment options</p> <p>Multiple Sclerosis (MS), Acute Severe Exacerbation or Relapses - Added requirement that patient is already on maintenance therapy for MS or will be starting maintenance therapy for MS or patient is pregnant or patient is post-partum and the prescriber has determined maintenance therapy is not clinically appropriate</p>	
Policy revision	<p>Cytomegalovirus Pneumonitis or Pneumonia in a Patient with Cancer or Transplant-Related Infection: Added the wording pneumonitis; the diagnosis wording was previously Cytomegalovirus Pneumonia in a Patient with Cancer or Transplant-Related Infection.</p> <p>Multiple Myeloma: The following option for approval was added in initial therapy as an alternative to existing criteria 1) Patient will be starting, has taken, or is currently receiving chimeric antigen receptor (CAR)-T cell therapy OR bispecific antibody therapy. Note: Examples of CAR-T cell therapy includes: Abecma (idecabtagene vicleucel intravenous infusion), Cartykti (ciltacabtagene autoleucel intravenous infusion). Note: Examples of bispecific antibody therapy includes: Elravaxio (elranatamab-bcmm subcutaneous injection), Tecvayli (teclistamab-cqyy subcutaneous injection), Talvey (talquetamab-tgvs subcutaneous injection).</p> <p>Parvovirus B19 Infection: 0.2 g/kg to 0.4 g/kg given intravenously daily for 5 to 10 days was added as an alternative dosing regimen.</p>	11/27/2023
Policy revision	<p>Alygo was added to the policy with the same criteria as all other immune globulin products.</p> <p>Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) or Polyradiculoneuraphy: Updated dosing from an initial loading dose of 2 g/kg</p>	02/27/2024

	<p>given intravenously in divided doses over 2 to 4 days consecutive days to 2 to 5 days consecutive days. Updated dosing from a maintenance dose of 1 g/kg given intravenously over one day or divided into two doses of 0.5 g/kg given on 2 consecutive days to a maintenance dose of 1 g/kg given intravenously in divided doses over 1 to 4 consecutive days.</p> <p>Revision based on review of commercial policy revision.</p>	
Policy review	No criteria changes (Based on review of LCA revision surveillance)	03/21/2024
Policy revision	<p>Immune Thrombocytopenia (ITP). The duration of approval for initial therapy for adults and pediatric patients was changed from 1 year to 3 months. Criterion for patients requiring retreatment with immune globulin was added to the continuation criteria. Continuation criterion was also updated from “Patient has responded to therapy” to patient is responding to therapy OR the patient has previously responded to therapy.</p> <p>The following was added to the Policy Statement:</p> <p>If the client is using the IVIG MSM Policy in tandem with this UM policy, the new approval may be entered without another clinical review for a preferred product only.</p> <p>Based on commercial policy revision</p>	04/23/2024
Policy revision	<p>Yimmugo was added to the policy with the same criteria as all other immune globulin products.</p> <p>Revision based on commercial policy update</p>	08/02/2024
Policy revision	<p>Primary Immunodeficiencies: Added a note that molecular testing is a type of genetic testing.</p> <p>Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) or Polyradiculoneuropathy: Added grip strength as an example of an improvement at physical examination.</p> <p>Myelin Oligodendrocyte Glycoprotein Antibody-Associated Disease (MOGAD): These conditions of approval were added to the policy.</p> <p>Guillain Barre Syndrome: For criterion ‘patient currently receiving immune globulin’, the wording “(this is to provide a second course) about 3 weeks after the first course” was removed.</p> <p>Passive Immunization for Measles (Post-Exposure Prophylaxis): Patient does not have evidence of immunity to measles (i.e.,) was updated to Patient cannot readily show they have evidence of immunity against measles (e.g.,).</p> <p>Post-Exposure Prophylaxis for Varicella: “within 10 days of exposure” was removed.</p> <p>Neuromyelitis Optica (Devic Syndrome). Added continuation of therapy criteria, updated prescriber specialty requirement to The medication is prescribed by or in consultation with a neurologist. Updated dosing.</p> <p>Immune-Mediated Necrotizing Myopathy. Added continuation of therapy criteria, updated previous trial requirements to Patient has tried a systemic</p>	12/11/2024

	corticosteroid; OR Corticosteroids are contraindicated, according to the prescriber; OR Patient has tried one of rituximab, methotrexate, mycophenolate, or tacrolimus; OR Patient has anti-HMGCR autoantibodies. Updated prescriber specialty requirement to The medication is prescribed by or in consultation with a neurologist or rheumatologist. Updated dosing. Revision based on revision to commercial policy.	
Policy review	No criteria changes Based on NCD/LCD/LCA surveillance review	06/03/2025
Policy revision	No criteria changes. Formatting and notation updates.	06/17/2025

This policy was prepared and managed by CareContinuum and henceforth adopted by Blue Advantage effective 04/01/2026. Reviews are to be executed on behalf of Blue Advantage in accordance with applicable guidelines.