curative

TITLE:	IMMUNOGLOBULINS POLICY
POLICY #:	MM-PNP-042
VERSION #:	01
DEPARTMENT:	MEDICAL MANAGEMENT
ORIGINAL EFFECTIVE DATE:	01/10/2024
CURRENT REVISION DATE:	N/A

1. PURPOSE

To establish medical necessity criteria for the review of immunoglobulin requests.

2. SCOPE

Medical and Pharmacy UM Departments

3. DEFINITIONS

N/A

4. RESPONSIBILITIES

N/A

5. POLICY

Provides guidelines regarding the extent of information and activities related to immunoglobulin review and defines the range of circumstances where the policy or procedure is applicable.

Note: **Requires Precertification:**

Precertification of intravenous immunoglobulins (IVIG) [Asceniv, Bivigam, Flebogamma DIF, Gammagard Liquid, Gammagard S/D, Gammaked, Gammaplex, Gamunex-C, Octagam, Panzyga, and Privigen] and subcutaneous immunoglobulins (SCIG) [Cutaquig, Cuvitru, Hizentra, HyQvia, and Xembify] is required of all Curative participating providers and members in applicable plan designs.

Intravenous Immunoglobulins (IVIG) and Subcutaneous Immunoglobulins (SCIG)

Criteria for Initial Approval

Curative considers the use of intravenous immunoglobulin (IVIG) therapy or subcutaneous immunoglobulin (SCIG) therapy medically necessary in members with the conditions specified below.

Primary Immunodeficiency

- **Severe combined immunodeficiency (SCID) or congenital agammaglobulinemia (eg, X-linked or autosomal recessive agammaglobulinemia):**
  - Diagnosis confirmed by genetic or molecular testing; **or**
  - Pretreatment IgG level < 200 mg/dL; **or**

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

- **Continuation of therapy for primary immunodeficiency disorders - continued treatment is considered medically necessary for primary immunodeficiency disorders when the following criteria are met:**
    - A reduction in the frequency of bacterial infections has been demonstrated since initiation of IVIG or SCIG therapy; **and**
    - IgG trough levels are monitored at least yearly and maintained at or above the lower range of normal for age (when applicable for indication); **or**
    - The prescriber will re-evaluate the dose of IVIG or SCIG and consider a dose adjustment (when appropriate).

Myasthenia Gravis

- **Short-term therapy is considered medically necessary for one month for members who are prescribed IVIG or SCIG for worsening weakness, acute exacerbation, or in preparation for surgery:**
    - Worsening weakness includes an increase in any of the following symptoms: diplopia, ptosis, blurred vision, difficulty speaking (dysarthria), difficulty swallowing (dysphagia), difficulty chewing, impaired respiratory status, fatigue, and limb weakness. Acute exacerbations include more severe swallowing difficulties and/or respiratory failure; **or**
    - Pre-operative management (eg, prior to thymectomy);
- **IVIG or SCIG therapy is considered medically necessary for members with refractory myasthenia gravis who have tried and failed 2 or more of standard therapies (e.g., corticosteroids, azathioprine, cyclosporine, mycophenolate mofetil, rituximab).**

Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)

- **Initial therapy is considered medically necessary when the following criteria are met:**
    - Disease course is progressive or relapsing/remitting for 2 months or longer; **and**
    - Moderate to severe functional disability; **and**
    - The diagnosis was confirmed by electrodiagnostic studies;
- **Continued treatment is considered medically necessary when the following criteria are met:**
    - Significant improvement in disability and maintenance of improvement since initiation of IVIG or SCIG therapy; **and**
    - IVIG or SCIG is being used at the lowest effective dose and frequency.

Dermatomyositis or Polymyositis

- **Initial therapy is considered medically necessary when the following criteria are met:**
    - Member has at least 4 of the following:
        - Proximal muscle weakness (upper or lower extremity and trunk)
        - Elevated serum creatine kinase (CK) or aldolase level

        - Muscle pain on grasping or spontaneous pain
        - Myogenic changes on EMG (short-duration, polyphasic motor unit potentials with spontaneous fibrillation potentials)
        - Positive for anti-synthetase antibodies (e.g., anti-Jo-1, also called histadyl tRNA synthetase)
        - Non-destructive arthritis or arthralgias
        - Systemic inflammatory signs (fever: more than 37°C at axilla, elevated serum CRP level or accelerated ESR of more than 20 mm/h by the Westergren method
        - Pathological findings compatible with inflammatory myositis (inflammatory infiltration of skeletal evidence of active regeneration may be seen); **and**
    - Standard first-line treatments (corticosteroids) and second-line treatments (immunosuppressants) have been tried but were unsuccessful or not tolerated; **or**
    - Member is unable to receive standard first-line and second-line therapy because of a contraindication or other clinical reason;
- **Continued therapy is considered medically necessary when the following criterion is met: Significant improvement in disability and maintenance of improvement since initiation of IVIG or SCIG therapy.**

Idiopathic Thrombocytopenic Purpura ITP/(Immune Thrombocytopenia)

- **Newly diagnosed ITP (diagnosed within the past 3 months) or initial therapy is considered medically necessary when the following criteria are met:**
    - Children (< 18 years of age)
        - Significant bleeding symptoms (mucosal bleeding or other moderate/severe bleeding); **or**
        - High risk for bleeding (see Appendix); **or**
        - Rapid increase in platelets is required (e.g., surgery or procedure);
    - Adults (≥ 18 years of age)
        - Platelet count < 30,000/mcL; **or**
        - Platelet count < 50,000/mcL and significant bleeding symptoms, high risk for bleeding or rapid increase in platelets is required; **and**
        - Corticosteroid therapy is contraindicated and IVIG or SCIG will be used alone or IVIG or SCIG will be used in combination with corticosteroid therapy;
- **Chronic/persistent ITP (≥ 3 months from diagnosis) or ITP unresponsive to first-line therapy: considered medically necessary when the following criteria are met:**
    - Platelet count < 30,000/mcL; **or**
    - Platelet count < 50,000/mcL and significant bleeding symptoms, high risk for bleeding or rapid increase in platelets is required; **and**
    - Relapse after previous response to IVIG or SCIG or inadequate response/intolerance/contraindication to corticosteroid or anti-D therapy;

- **Adults with refractory ITP after splenectomy: considered medically necessary when *either* of the following criteria is met:**
  - Platelet count < 30,000/mcL; **or**
  - Significant bleeding symptoms;
- **ITP in pregnant women: considered medically necessary through delivery for pregnant women with ITP**

  For ITP indications based upon high risk of bleeding, the member's risk factor(s) for bleeding (see Appendix) or reason requiring a rapid increase in platelets must be provided.

B-cell Chronic Lymphocytic Leukemia (CLL)

- **Initial therapy is considered medically necessary when *all* of the following criteria are met:**
  - IVIG or SCIG is prescribed for prophylaxis of bacterial infections; **and**
  - Member has a history of recurrent sinopulmonary infections requiring intravenous antibiotics or hospitalization; **and**
  - Member has a pretreatment serum IgG level <500 mg/dL;
- **Continued therapy is considered medically necessary when a reduction in the frequency of bacterial infections has been demonstrated since initiation of IVIG or SCIG therapy.**

Prophylaxis of Bacterial Infections in HIV-Infected Pediatric Members

- **Initial therapy is considered medically necessary for pediatric members with HIV infection when *any* of the following criteria are met:**
  - IVIG or SCIG is prescribed for primary prophylaxis of bacterial infections and pretreatment serum IgG < 400 mg/dL; **or**
  - IVIG or SCIG is prescribed for secondary prophylaxis of bacterial infections for members with a history of recurrent bacterial infections (> 2 serious bacterial infections in a 1-year period); **or**
  - Member has failed to form antibodies to common antigens, such as measles, pneumococcal, and/or Haemophilus influenzae type b vaccine; **or**
  - Member lives in an area where measles is highly prevalent and who have not developed an antibody response after two doses of measles, mumps, and rubella virus vaccine live; **or**
  - Member has been exposed to measles and request is for a single dose; **or**
  - Member has chronic bronchiectasis that is suboptimally responsive to antimicrobial and pulmonary therapy;

- **Continued therapy is considered medically necessary when a reduction in the frequency of bacterial infections has been demonstrated since initiation of IVIG or SCIG therapy.**

Bone Marrow Transplant/Hematopoietic Stem Cell Transplant (BMT/HSCT)

- **Initial therapy is considered medically necessary for members who are BMT/HSCT recipients when the following criteria are met:**
  - IVIG or SCIG therapy will be used to prevent the risk of acute graft-versus-host disease, associated interstitial pneumonia (infectious or idiopathic), septicemia, and other infections (e.g., cytomegalovirus infections [CMV], recurrent bacterial infection); **and**
  - **Either** of the following:
    - IVIG or SCIG is requested within the first 100 days post-transplant; *or*
    - Member has a pretreatment serum IgG < 400 mg/dL;
      1. Continued therapy is considered medically necessary when a reduction in the frequency of bacterial infections has been demonstrated since initiation of IVIG or SCIG therapy.

Multifocal Motor Neuropathy (MMN)

- **Initial therapy is considered medically necessary when the following criteria are met:**
  - Member experienced progressive, multifocal, asymmetrical weakness without objective sensory loss in 2 or more nerves for at least 1 month; **and**
  - The diagnosis was confirmed by electrodiagnostic studies;
- **Continued therapy is considered medically necessary when significant improvement in disability and maintenance of improvement have occurred since initiation of IVIG or SCIG therapy.**

Guillain-Barre Syndrome (GBS)

- **Therapy for up to 1 month total is considered medically necessary for GBS when the following criteria are met:**
  - Member has severe disease with significant weakness (e.g., inability to stand or walk without aid, respiratory weakness); *and*
  - Onset of neurologic symptoms occurred less than 4 weeks from the anticipated start of therapy.

Lambert-Eaton Myasthenic Syndrome (LEMS)

- **Initial therapy for LEMS is considered medically necessary when the following criteria are met:**
  - Diagnosis has been confirmed by **either** of the following:
    - Neurophysiology studies (e.g., electromyography); **or**
    - A positive anti- P/Q type voltage-gated calcium channel antibody test; **and**

  - Anticholinesterases (e.g., pyridostigmine) and amifampridine (e.g., 3,4-diaminopyridine phosphate, Firdapse) have been tried but were unsuccessful or not tolerated; **and**
  - Weakness is severe or there is difficulty with venous access for plasmapheresis;
- **Continued therapy is considered medically necessary when member is responding to therapy (i.e., there is stability or improvement in symptoms relative to the natural course of LEMS).**

Kawasaki Syndrome

- Therapy is considered medically necessary for pediatric members with Kawasaki syndrome.

Fetal/Neonatal Alloimmune Thrombocytopenia (F/NAIT)

- Therapy is considered medically necessary for treatment of F/NAIT.

Parvovirus B19-induced Pure Red Cell Aplasia (PRCA)

- Therapy is considered medically necessary for severe, refractory anemia associated with bone marrow suppression, with parvovirus B19 viremia.

Stiff-person Syndrome

- Therapy is considered medically necessary for stiff-person syndrome when the following criteria are met:
  - Diagnosis has been confirmed by anti-glutamic acid decarboxylase (GAD) antibody testing; and
  - Member had an inadequate response to first-line treatment (benzodiazepines and/or baclofen).

Management of immune checkpoint inhibitor-related toxicities

- Therapy for 1 month is considered medically necessary for immune checkpoint-inhibitor toxicities when all of the following criteria are met:
  - Member has experienced a moderate or severe adverse event to a PD-1 or PD-L1 inhibitor (e.g., pembrolizumab, nivolumab, atezolizumab, avelumab, durvalumab); *and*
  - The offending medication has been held or discontinued; *and*
  - Member experienced one or more of the following adverse events: myocarditis, bullous dermatitis, Stevens-Johnson syndrome, toxic epidermal necrolysis, pneumonitis, myasthenia gravis, peripheral neuropathy, encephalitis, transverse myelitis, severe inflammatory arthritis, Guillain-Barre syndrome, or steroid-refractory myalgias or myositis.

Acquired Red Cell Aplasia

- Therapy is considered medically necessary for acquired red cell aplasia.

Acute Disseminated Encephalomyelitis

- Therapy is considered medically necessary for acute disseminated encephalomyelitis in members who have had an insufficient response or a contraindication to intravenous corticosteroid treatment.

Autoimmune Mucocutaneous Blistering Disease

- Therapy is considered medically necessary for autoimmune mucocutaneous blistering disease (includes pemphigus vulgaris, pemphigus foliaceus, bullous pemphigoid, mucous membrane pemphigoid, and epidermolysis bullosa aquisita) when the following criteria are met:
  - Diagnosis has been proven by biopsy and confirmed by pathology report; *and*
  - Condition is rapidly progressing, extensive or debilitating; *and*
  - Member has failed or experienced significant complications (e.g., diabetes, steroid-induced osteoporosis) from standard treatment (corticosteroids, immunosuppressive agents).

Autoimmune Hemolytic Anemia

- Therapy is considered medically necessary for warm-type autoimmune hemolytic anemia in members who do not respond or have a contraindication to corticosteroids or splenectomy.

Autoimmune Neutropenia

- Therapy is considered medically necessary for autoimmune neutropenia where treatment with G-CSF (granulocyte colony stimulating factor) is not appropriate.

Birdshot Retinochoroidopathy

- Therapy is considered medically necessary for birdshot (vitiliginous) retinochoroidopathy that is not responsive to immunosuppressives (e.g., corticosteroids, cyclosporine).

BK Virus Associated Nephropathy

- Therapy is considered medically necessary for BK virus associated nephropathy.

Churg-Strauss Syndrome

- Therapy is considered medically necessary for severe, active Churg-Strauss syndrome as adjunctive therapy for members who have experienced failure, intolerance, or are contraindicated to other interventions.

Enteroviral Meningoencephalitis

- Therapy is considered medically necessary or severe cases of enteroviral meningoencephalitis.

Hematophagocytic Lymphohistiocytosis (HLH) or Macrophage Activation Syndrome (MAS)

- Therapy is considered medically necessary for treatment of hypogammaglobulinemia in HLH or MAS when total IgG is less than 400 mg/dL or two standard deviations below the mean for age.

Hemolytic Disease of Newborn

- Therapy is considered medically necessary for isoimmune hemolytic disease in neonates.

HIV-associated Thrombocytopenia

- Therapy is considered medically necessary for HIV-associated thrombocytopenia when the following criteria are met:

- Pediatric members with IgG < 400 mg/dL and has *one* of the following:
  - 2 or more bacterial infections in a 1-year period despite antibiotic chemoprophylaxis with TMP-SMZ or another active agent; **or**
  - Received 2 doses or measles vaccine and lives in a region with a high prevalence or measles; **or**
  - HIV-associated thrombocytopenia despite antiretroviral therapy; **or**
  - Chronic bronchiectasis that is suboptimally responsive to antimicrobial and pulmonary therapy; **or**
  - T4 cell count ≥ 200/mm3
- Adult members with significant bleeding, platelet count < 20,000/mcL, and failure of RhIG in Rh-positive persons.

Hyperimmunoglobulinemia E Syndrome

- Therapy is considered medically necessary to treat severe eczema in hyperimmunoglobulinemia E syndrome.

Hypogammaglobulinemia from CAR-T therapy

- Therapy is considered medically necessary for members with IgG < 400 mg/dL receiving treatment with CAR-T therapy (including but not limited to idecabtagen vicleucel [Abecma], tisagenlecleucel [Kymriah], or axicabtagene ciloleucel [Yescarta]).

Multiple Myeloma

- Therapy is considered medically necessary for multiple myeloma in members who have recurrent, serious infections despite the use of prophylactic antibiotics.

Neonatal Hemochromatosis

- Therapy is considered medically necessary for members who are pregnant with a history of pregnancy ending in documented neonatal hemochromatosis.

Opsoclonus-myoclonus

- Therapy is considered medically necessary for treatment of **either** of the following:
  - Paraneoplastic opsoclonus-myoclonus-ataxia associated with neuroblastoma; **or**
  - Refractory opsoclonus-myoclonus, as last-resort treatment.

Post-transfusion Purpura

- Therapy is considered medically necessary for post-transfusion purpura.

Rasmussen Encephalitis

- Therapy is considered medically necessary for Rasmussen encephalitis in members whose symptoms do not improve with anti-epileptic drugs and corticosteroids.

Renal Transplantation

- Therapy is considered medically necessary for members undergoing renal transplantation from a live donor with ABO incompatibility or positive cross match.

Secondary Immunosuppression Associated with Major Surgery, Hematological Malignancy, Major Burns, and Collagen-Vascular Diseases

- Therapy is considered medically necessary to prevent or modify recurrent bacterial or viral infections in members with secondary immunosuppression (IgG < 400 mg/dL) associated with major surgery, hematological malignancy, extensive burns, or collagen-vascular disease.

Solid Organ Transplantation

- Therapy is considered medically necessary for solid organ transplantation for allosensitized members.

Toxic Epidermal Necrolysis and Stevens-Johnson Syndrome

- Therapy is considered medically necessary for severe cases of toxic epidermal necrolysis or Stevens-Johnson syndrome.

Toxic Shock Syndrome

- Therapy is considered medically necessary for staphylococcal or streptococcal toxic shock syndrome when the infection is refractory to several hours of aggressive therapy, an undrainable focus is present, or the member has persistent oliguria with pulmonary edema.

Systemic Lupus Erythematosus

- Therapy is considered medically necessary for severe, active SLE in members who have experienced inadequate response, intolerance or have a contraindication to first and second line therapies (e.g., hydroxychloroquine, glucocorticoids, anifrolumab, rituximab).

Measles (Rubeola) Prophylaxis

- Therapy is considered medically necessary for postexposure prophylaxis to prevent or modify symptoms of measles (rubeola) in susceptible members exposed to the disease less than 6 days previously.

Tetanus Treatment and Prophylaxis

- Therapy is considered medically necessary for treatment or postexposure prophylaxis of tetanus as an alternative when tetanus immune globulin (TIG) is unavailable.

Varicella Prophylaxis

- Therapy is considered medically necessary for for postexposure prophylaxis of varicella in susceptible individuals when varicella-zoster immune globulin (VZIG) is unavailable.

Toxic Necrotizing Fasciitis Due To Group A Streptococcus

- Therapy is considered medically necessary for members with fasciitis due to invasive streptococcal infection.

Curative considers all other indications as experimental and investigational (for additional information, see Experimental and Investigational and Background sections).

Continuation of Therapy

Curative considers the continuation of IVIG or SCIG therapy medically necessary when *either* of the following criteria is met:

- For conditions with continuation criteria listed above under Section I: Members who are currently receiving IVIG or SCIG must meet the applicable continuation criteria for continued medical necessity for the member's condition; **or**
- For all other conditions, all members (including new members) must meet medical necessity for initial medical necessity criteria.

Experimental and Investigational

Curative considers the use of IVIG and SCIG experimental and investigational for all other clinical conditions because its effectiveness for indications other than the ones listed above has not been established.

Curative considers magnesium infusion experimental and investigational as a premedication for IVIG infusion.

6. PROCEDURE

N/A

7. TRAINING REQUIREMENT

7.1. All Medical UM Associates are responsible for reading and comprehending this procedure. Employees are also responsible for contacting management or Privacy and Compliance with any questions or concerns regarding the information contained within this procedure.

8. ENFORCEMENT

Violations of this controlled document will cause the imposition of sanctions in accordance with the Curative sanctions controlled document. This may include verbal/written warning, suspension, up to termination of employment or volunteer, intern, contractor status with Curative. Additional civil, criminal and equitable remedies may apply.

9. DOCUMENTATION

Provide details regarding any specific documentation required for this policy or to meet any legal or regulatory requirements related to this policy.

10. REFERENCE DOCUMENTS AND MATERIALS

10.1 U.S. Food and Drug Administration (FDA)-Approved Indications for Intravenous Immunoglobulins (IVIG)

- Asceniv (immune globulin intravenous [human] - slra)

  Primary immunodeficiency
- Bivigam (immune globulin intravenous [human])

  Primary immunodeficiency
- Flebogamma 5% DIF (immune globulin intravenous [human])

  Primary immunodeficiency
- Flebogamma 10% DIF (immune globulin intravenous [human])
  - Primary immunodeficiency
  - Idiopathic thrombocytopenic purpura

- Gammagard Liquid (immune globulin infusion [human])
    - Primary immunodeficiency
    - Multifocal motor neuropathy
- Gammagard S/D (immunoglobulin intravenous [human])
    - Primary immunodeficiency
    - Idiopathic thrombocytopenic purpura
    - B-cell chronic lymphocytic leukemia (CLL)
    - Kawasaki syndrome
- Gammaked (immune globulin injection [human])
    - Primary immunodeficiency
    - Idiopathic thrombocytopenic purpura
    - Chronic inflammatory demyelinating polyneuropathy (CIDP)
- Gammaplex 5% (immune globulin intravenous [human]) and Gammaplex 10% (immune globulin intravenous [human])
    - Primary immunodeficiency
    - Idiopathic thrombocytopenic purpura
- Gamunex-C (immune globulin injection [human])
    - Primary immunodeficiency
    - Idiopathic thrombocytopenic purpura
    - Chronic inflammatory demyelinating polyneuropathy (CIDP)
- Octagam 5% (immune globulin intravenous [human])

  Primary immunodeficiency
- Octagam 10% (immune globulin intravenous [human])
    - Idiopathic thrombocytopenic purpura
    - Dermatomyositis
- Panzyga (immune globulin intravenous [human])
    - Primary immunodeficiency
    - Idiopathic thrombocytopenic purpura
    - Chronic inflammatory demyelinating polyneuropathy (CIDP)
- Privigen (immune globulin intravenous [human])
    - Primary immunodeficiency
    - Idiopathic thrombocytopenic purpura
    - Chronic inflammatory demyelinating polyneuropathy (CIDP)

Note: CSL Behring decided to discontinue the production of Carimune NF (immune globulin intravenous [human]) in 3Q 2018 due to the preference among healthcare providers and patients for newer, more advanced immune globulin options (i.e., Privigen (immune globulin intravenous [human]), 10% liquid, and Hizentra (immune globulin subcutaneous [human]), 20% liquid.

Compendial Uses for Intravenous Immunoglobulins (IVIG)

- Prophylaxis of bacterial infections in pediatric human immunodeficiency virus (HIV) infection
- Bone marrow transplant (BMT)/hematopoietic stem cell transplant (HSCT)
- Polymyositis
- Myasthenia gravis
- Guillain-Barré syndrome
- Lambert-Eaton myasthenic syndrome
- Fetal/neonatal alloimmune thrombocytopenia
- Parvovirus B19-induced pure red cell aplasia
- Stiff-person syndrome
- Management of immune checkpoint inhibitor-related toxicities
- Acquired red cell aplasia
- Acute disseminated encephalomyelitis
- Autoimmune mucocutaneous blistering diseases
- Autoimmune hemolytic anemia
- Autoimmune neutropenia
- Birdshot retinochoroidopathy
- BK virus associated nephropathy
- Churg-Strauss Syndrome
- Enteroviral meningoencephalitis
- Hematophagocytic lymphohistiocytosis (HLH) or macrophage activation syndrome (MAS)
- Hemolytic disease of newborn
- HIV-associated thrombocytopenia
- Hyperimmunoglobulinemia E Syndrome
- Hypogammaglobulinemia from chimeric antigen receptor T (CAR-T) therapy
- Measles (Rubeola) prophylaxis
- Multiple myeloma
- Neonatal hemochromatosis, prophylaxis
- Opsoclonus-myoclonus

- Paraneoplastic opsonus-myoclonus ataxia associated with neuroblastoma
- Post-transfusion purpura
- Rasmussen encephalitis
- Renal transplantation from a live donor with ABO incompatibility or positive cross match
- Secondary immunosuppression associated with major surgery, hematological malignancy, major burns, and collagen-vascular diseases
- Solid organ transplantation, for allosensitized members
- Systemic lupus erythematosus (SLE)
- Tetanus treatment and prophylaxis
- Toxic epidermal necrolysis and Stevens-Johnson syndrome
- Toxic shock syndrome
- Toxic necrotizing fasciitis due to group A streptococcus
- Varicella prophylaxis

U.S. Food and Drug Administration (FDA)-Approved Indications for Subcutaneous Immunoglobulins (SCIG)

- Cutaquig (immune globulin subcutaneous [human] - hipp, 16.5% Solution)

  Cutaquig is indicated as replacement therapy for primary humoral immunodeficiency (PI) in adults and pediatric patients 2 years of age and older.

- Cuvitru (immune globulin subcutaneous [human], 20% Solution)

  Cuvitru is indicated as replacement therapy for primary humoral immunodeficiency in adult and pediatric patients two years of age and older.

- Hizentra (immune globulin subcutaneous [human], 20% Liquid)
  - Hizentra is indicated as replacement therapy for primary humoral immunodeficiency in adults and pediatric patients 2 years of age and older.
  - Hizentra is indicated for the treatment of adult patients with chronic inflammatory demyelinating polyneuropathy (CIDP) as maintenance therapy to prevent relapse of neuromuscular disability and impairment.

Limitations of Use:

Hizentra maintenance therapy in CIDP has been systematically studied for 6 months and for a further 12 months in a follow-up study. Maintenance therapy beyond these periods should be individualized based upon the patient's response and need for continued therapy.

- HyQvia (immune globulin infusion 10% [human] with recombinant human hyaluronidase)

  HyQvia is indicated for the treatment of primary immunodeficiency in adults and pediatric patients two years of age and older.

Limitations of Use:

Safety and efficacy of chronic use of recombinant human hyaluronidase in HyQvia have not been established in conditions other than primary immunodeficiency.

- Xembify (immune globulin subcutaneous [human] - klhw, 20% Solution)

  Xembify is indicated for treatment of primary humoral immunodeficiency (PI) in patients 2 years of age and older.

Compendial Uses for Subcutaneous Immunoglobulins (SCIG)

- Idiopathic thrombocytopenic purpura (ITP)
- Multifocal motor neuropathy
- Kawasaki syndrome
- B-cell chronic lymphocytic leukemia (CLL)
- Prophylaxis of bacterial infections in pediatric human immunodeficiency virus (HIV) infection
- Bone marrow transplant (BMT)/hematopoietic stem cell transplant (HSCT) recipients
- Dermatomyositis
- Polymyositis
- Myasthenia gravis
- Guillain-Barré syndrome
- Lambert-Eaton myasthenic syndrome
- Fetal/neonatal alloimmune thrombocytopenia
- Parvovirus B19-induced pure red cell aplasia
- Stiff-person syndrome
- Management of immune checkpoint inhibitor-related nervous system adverse events
- Acquired red cell aplasia
- Acute disseminated encephalomyelitis
- Autoimmune mucocutaneous blistering diseases
- Autoimmune hemolytic anemia
- Autoimmune neutropenia
- Birdshot retinochoroidopathy
- BK virus associated nephropathy
- Churg-Strauss Syndrome
- Enteroviral meningoencephalitis
- Hematophagocytic lymphohistiocytosis (HLH) or macrophage activation syndrome (MAS)
- Hemolytic disease of newborn

- HIV-associated thrombocytopenia
- Hyperimmunoglobulinemia E Syndrome
- Hypogammaglobulinemia from chimeric antigen receptor T (CAR-T) therapy
- Multiple myeloma
- Neonatal hemochromatosis, prophylaxis
- Opsoclonus-myoclonus
- Paraneoplastic opsonus-myoclonus ataxia associated with neuroblastoma
- Post-transfusion purpura
- Rasmussen encephalitis
- Renal transplantation from a live donor with ABO incompatibility or positive cross match
- Secondary immunosuppression associated with major surgery, hematological malignancy, major burns, and collagen-vascular diseases
- Solid organ transplantation, for allosensitized members
- Toxic epidermal necrolysis and Stevens-Johnson syndrome
- Toxic shock syndrome
- Systemic lupus erythematosus (SLE)
- Toxic necrotizing fasciitis due to group A streptococcus
- Measles (Rubeola) prophylaxis
- Tetanus treatment and prophylaxis
- Varicella prophylaxis

11. COLLABORATING DEPARTMENTS

N/A

12. DOCUMENT CONTROL

APPROVED BY:		
Charles,Brandon	3/25/2024	DocuSigned by: Charles,Brandon DE2813BF834C40A...
(Printed Name)	**(Date)**	**(Signature)**

REVISION HISTORY			
Date	**Author**	**Version**	**Comments**
			Initial Version

APPENDICES

N/A