

## Medical Pharmacy Drug Prior Authorization Criteria

<b>Drug Trade Name:</b>	See Below	<b>Drug Generic Name:</b>	Intravenous Immune Globulins (immunoglobulin)
<b>J Code:</b>	See Below	<b>1 billable unit =</b>	500 mg
<b>Original Date of Review:</b>	12/7/2022	<b>Last Reviewed:</b>	9/11/2024
<b>Revision Date History</b>	12/7/2022, 3/15/2023, 12/13/2023		

**Drug Trade Name (J Code); Intravenous\*:** Asceniv (J1554); Bivigam (J1556); Carimune [NF](J1566); Flebogamma (J1572); Gamunex-C (J1561); Gammagard Liquid (J1569); Gammagard S/D (J1566); Gammaked (J1561); Gammaplex (J1557); Intravenous Immune Globulin (J1599); Octagam (J1568); Panzyga (J1576); Privigen (J1459)

\*Subcutaneous immune globulin criteria listed separately

Immune globulin supplies a broad spectrum of opsonizing and neutralizing IgG antibodies against a wide variety of bacterial and viral agents. The specific mechanism of action has not been fully elucidated, but may include immunomodulatory effects.

### Criteria:

#### **Length of authorization:**

- Initial and renewal authorization periods vary by specific covered indication.
- Unless otherwise specified:
  - Initial Authorization: 6 months
  - Renewal Authorizations: 12 months

#### **Age: see below for product specific requirements**

#### **Diagnoses:**

- Primary immunodeficiency (PID)/Wiskott - Aldrich syndrome
- Immune thrombocytopenia/Idiopathic thrombocytopenia purpura (ITP)
- Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)
- Guillain-Barre Syndrome (Acute inflammatory polyneuropathy)
- Multifocal Motor Neuropathy
- HIV infected children: Bacterial control or prevention
- Myasthenia Gravis
- Dermatomyositis/Polymyositis
- Complications of transplanted solid organ (kidney, liver, lung, heart, pancreas) and bone marrow transplant
- Stiff-Person Syndrome
- Allogeneic Bone Marrow or Stem Cell Transplant
- Kawasaki's Disease (KD)
- Fetal Alloimmune Thrombocytopenia
- Neonatal Alloimmune Thrombocytopenia
- Auto-immune Mucocutaneous Blistering Diseases
- Acquired Immune Deficiency secondary to Acute Lymphoblastic Leukemia (ALL)
- Acquired Immune Deficiency secondary to Chronic Lymphocytic Leukemia † or Multiple Myeloma

- Toxic Shock Syndrome
- Management of Immune-Checkpoint-Inhibitor Related Toxicity
- Management of CAR T-Cell-Related Toxicity

**Quantity Limit (max daily dose) [NDC unit]:**

Drug	Vial size in IgG grams	# of vials	
		One time only	Per 28 days
		Load	Maintenance
<b>Asceniv</b>	5	18	18
<b>Bivigam</b>	5	1	1
	10	23	23
<b>Carimune NF</b>	3, 6	1	1
	12	19	19
<b>Flebogamma 10% DIF</b>	5, 10, 20	1	1
	20	11	11
<b>Flebogamma 5% DIF</b>	0.5, 2.5, 5, 10	1	1
	20	11	11
<b>Gamunex-C</b>	1, 2.5, 5, 10, 20	1	1
	40	6	6
<b>Gammagard Liquid</b>	1, 2.5, 5, 10, 20	1	1
	30	8	8
<b>Gammagard S/D</b>	5	1	1
	10	23	23
<b>Gammaked</b>	1, 2.5, 5, 10	1	1
	20	11	11
<b>Gammaplex</b>	5, 10	1	1
	20	11	11
<b>Octagam 10%</b>	2, 5, 10, 20	1	1
	30	8	8
<b>Octagam 5%</b>	1, 2.5, 5, 10	1	1
	25	9	9
<b>Privigen</b>	5, 10, 20	1	1
	40	6	6
<b>Panzyga</b>	1, 2.5, 5, 10, 20	1	1
	30	8	8

**Maximum Units (per dose and over time) [HCPCS Unit]:**

The number of billable units approved will be based on calculated doses rounded to the nearest 5-gram increment in adult patients. For pediatric patients, doses will be rounded up to the next commercially available product size.

<b>Indication</b>	<b>Billable Units</b>	<b>Per # days (unless otherwise specified)</b>
<b>PID</b>	184	21
<b>CIDP</b>	Load: 460	4
	Maintenance: 230	21
<b>Immune thrombocytopenia/ITP</b>	460	28
<b>FAIT</b>	200	7
<b>Kawasaki's Disease (Pediatric Patients only)</b>	232	1 dose only
<b>Multifocal Motor Neuropathy</b>	460	28
<b>CLL/MM</b>	92	21
<b>ALL</b>	92	21
<b>HIV (Pediatric Patients only)</b>	47	28
<b>Guillain-Barre</b>	460	5 (for one cycle only)
<b>Myasthenia Gravis</b>	460	28
<b>Auto-immune blistering diseases</b>	460	28
<b>Bone Marrow or Stem Cell Transplant</b>	115	7
<b>Dermatomyositis/Polymyositis</b>	460	28
<b>Complications of transplanted solid organ (kidney, liver, lung, heart and pancreas transplants)</b>	460	28
<b>Stiff Person</b>	460	28
<b>Toxic shock syndrome</b>	460	5 (for one cycle only)
<b>NAIT</b>	16	2 doses only
<b>Management of Immune Checkpoint Inhibitor Related Toxicity</b>	460	5 (for one cycle only)
<b>Management of CAR T-Cell-Related Toxicity</b>	115	28

### **Initial Approval Criteria**

- **Universal Criteria**

- Baseline values for BUN and serum creatinine obtained within 30 days of request; **AND** (see indication specific criteria)

- **Indication Specific Criteria**

#### **Primary immunodeficiency (PID)/Wiskott - Aldrich syndrome**

Such as: x-linked agammaglobulinemia, common variable immunodeficiency, transient hypogammaglobulinemia of infancy, IgG subclass deficiency with or without IgA deficiency, antibody deficiency with near normal immunoglobulin levels, and combined deficiencies (severe combined immunodeficiencies, ataxia-telangiectasia, x-linked lymphoproliferative syndrome) [list not all inclusive]

- Patient's IgG level is < 200 mg/dL **OR both** of the following:
  - Patient has a history of multiple hard to treat infections as indicated by at least **one** of the following:
    - Four or more ear infections within 1 year
    - Two or more serious sinus infections within 1 year
    - Two or more months of antibiotics with little effect
    - Two or more pneumonias within 1 year
    - Recurrent or deep skin abscesses
    - Need for intravenous antibiotics to clear infections
    - Two or more deep-seated infections including septicemia; **AND**
  - Patient has a deficiency in producing antibodies in response to vaccination; **AND**
    - Titers were drawn before challenging with vaccination; **AND**
    - Titers were drawn between 4 and 8 weeks of vaccination

### **Immune thrombocytopenia/Idiopathic thrombocytopenia purpura (ITP)**

#### *Acute Immune thrombocytopenia:*

- To manage acute bleeding due to severe thrombocytopenia (platelet count < 30 X 10<sup>9</sup>/L); **OR**
- To increase platelet counts prior to invasive surgical procedures such as splenectomy (platelet count < 100 X 10<sup>9</sup>/L); **OR**
- Patient has severe thrombocytopenia (platelet count < 20 X 10<sup>9</sup>/L)  
 \*\*Note:\*\* Authorization is valid for 1 month only and cannot be renewed

#### *Chronic Immune Thrombocytopenia (CIT):*

- The patient is at increased risk for bleeding as indicated by a platelet count < 30 X 10<sup>9</sup>/L; **AND**
- History of failure, contraindication, or intolerance to corticosteroids; **AND**
- Duration of illness > 6 months

### **Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)**

- Patient's disease course is progressive or relapsing and remitting for >2 months; **AND**
- Patient has abnormal or absent deep tendon reflexes in upper or lower limbs; **AND**
- Electrodiagnostic testing indicating demyelination:
  - Partial motor conduction block in at least 2 motor nerves or in 1 nerve plus one other demyelination criterion listed here in at least 1 other nerve; **OR**
  - Distal CMAP duration increase in at least 1 nerve plus one other demyelination criterion listed here in at least 1 other nerve; **OR**
  - Abnormal temporal dispersion conduction must be present in at least 2 motor nerves; **OR**
  - Reduced motor conduction velocity in at least 2 motor nerves; **OR**
  - Prolonged distal motor latency in at least 2 motor nerves; **OR**
  - Absent F wave in at least 2 motor nerves plus one other demyelination criterion listed herein at least 1 other nerve; **OR**
  - Prolonged F wave latency in at least 2 motor nerves; **AND**
- Patient is refractory or intolerant to corticosteroids (e.g., prednisolone, prednisone, etc.) given in therapeutic doses over at least three months; **AND**

- Baseline in strength/weakness has been documented using an objective clinical measuring tool(e.g., INCAT, Medical Research Council (MRC) muscle strength, 6-MWT, Rankin, Modified Rankin, etc.)

**\*\*Note:\*\*** Initial authorization is valid for 3 months

### **Guillain-Barre Syndrome (Acute inflammatory polyneuropathy)**

- Patient has severe disease (i.e., patient requires assistance to ambulate); **AND**
- Onset of symptoms are recent (i.e., less than 1 month); **AND**
- Patient has abnormal or absent deep tendon reflexes in upper or lower limbs; **AND**
- Patient diagnosis is confirmed using a cerebrospinal fluid (CSF) analysis; **AND**
- Approval will be granted for a maximum of 2 rounds of therapy within 6 weeks of onset

**\*\*Note:\*\*** Authorization is valid for 2 months only and cannot be renewed

### **Multifocal Motor Neuropathy**

- Patient has progressive focal, asymmetric limb weakness (without sensory symptoms) for >1month; **AND**
- Patient has complete or partial conduction block or abnormal temporal dispersion conduction in at least 2 motor nerves; **AND**
- Patient has normal sensory nerve conduction on all nerves tested; **AND**
- Baseline in strength/weakness has been documented using an objective clinical measuring tool(e.g., INCAT, Medical Research Council (MRC) muscle strength, 6-MWT, Rankin, Modified Rankin, etc.)

**\*\*Note:\*\*** Initial authorization is valid for 3 months

### **HIV infected children: Bacterial control or prevention**

- Patient age does not exceed 13 years of age; **AND**
- Patient's IgG level is < 400 mg/dL

### **Myasthenia Gravis**

- Patient has a positive serologic test for anti-acetylcholine receptor (AChR) antibodies; **AND**
- Patient has an acute exacerbation resulting in impending myasthenic crisis (i.e., respiratory compromise, acute respiratory failure, and/or bulbar compromise); **AND**
- Patient is failing on conventional immunosuppressant therapy alone (e.g., corticosteroids, azathioprine, cyclosporine, mycophenolate, methotrexate, tacrolimus, cyclophosphamide, etc.); **AND**
- Patient will be on combination therapy with corticosteroids or other immunosuppressant (e.g., azathioprine, mycophenolate, cyclosporine, methotrexate, tacrolimus, cyclophosphamide, etc.)

**\*\*Note:\*\*** Authorization is valid for 1 course (1 month) only and cannot be renewed

### **Dermatomyositis/ Polymyositis**

- Patient has severe active disease; **AND**
- Patient has proximal weakness in all upper and/or lower limbs; **AND**
- Diagnosis has been confirmed by muscle biopsy; **AND**
- Patient has failed a trial of corticosteroids (i.e., prednisone); **AND**
- Patient has failed a trial of an immunosuppressant (e.g., methotrexate, azathioprine, etc.); **AND**
- Must be used as part of combination therapy with other agents; **AND**
- Patient has a documented baseline physical exam and muscular strength/function

**\*\*Note:\*\*** Initial authorization is valid for 3 months

### **Complications of transplanted solid organ (kidney, liver, lung, heart, pancreas) and bone marrow transplant**

Coverage is provided for one or more of the following (list not all-inclusive):

- Suppression of panel reactive anti-human leukocyte antigen (HLA) antibodies prior to transplantation
- Treatment of antibody-mediated rejection of solid organ transplantation
- Prevention or treatment of viral infections (e.g., cytomegalovirus, Parvo B-19 virus, and Polyoma BK virus)

### **Stiff-Person Syndrome**

- Patient has anti-glutamic acid decarboxylase (GAD) antibodies; **AND**
- Patient has failed at least 2 of the following treatments: benzodiazepines, baclofen, gabapentin, valproate, tiagabine, or levetiracetam; **AND**
- Patient has a documented baseline on physical exam

### **Allogeneic Bone Marrow or Stem Cell Transplant**

- Used for prevention of acute Graft-Versus-Host-Disease (aGVHD) or infection; **AND**
- Patient's bone marrow (BMT) or hematopoietic stem cell (HSCT) transplant was allogeneic; **AND**
- Patient's IgG level is less than 400 mg/dL
- **\*\*Note:\*\*** Initial authorization is valid for 3 months

### **Kawasaki's Disease**

**\*\*Note:\*\*** Authorization is valid for 1 course (1 month) only and cannot be renewed

### **Fetal Alloimmune Thrombocytopenia (FAIT) † 31,36,46,83**

- Patient has a history of one or more of the following:
  - Previous FAIT pregnancy
  - Family history of the disease

- Screening reveals platelet alloantibodies

**\*\*Note:** Authorization is valid through the delivery date only and cannot be renewed

### **Neonatal Alloimmune Thrombocytopenia (NAIT)**

**\*\*Note:** Authorization is valid for 1 course (1 month) only and cannot be renewed

### **Auto-immune Mucocutaneous Blistering Diseases**

- Patient has been diagnosed with one of the following:
  - Pemphigus vulgaris
  - Pemphigus foliaceus
  - Bullous Pemphigoid
  - Mucous Membrane Pemphigoid (a.k.a. Cicatricial Pemphigoid)
  - Epidermolysis bullosa aquisita
  - Pemphigus gestationis (Herpes gestationis)
  - Linear IgA dermatosis; **AND**
- Patient has severe disease that is extensive and debilitating; **AND**
- Diagnosis has been confirmed by biopsy; **AND**
- Patient's disease is progressive; **AND**
- Disease is refractory to a trial of conventional therapy with corticosteroids and concurrent immunosuppressive treatment (e.g., azathioprine, cyclophosphamide, mycophenolate mofetil, etc.); **AND**
- Patient has a documented baseline on physical exam

### **Acquired Immune Deficiency secondary to Acute Lymphoblastic Leukemia (ALL)**

- Used for prevention of infection; **AND**
- Patient age is less than 18 years old; **AND**
- Patient's IgG level is less than 400 mg/dL

### **Acquired Immune Deficiency secondary to Chronic Lymphocytic Leukemia or Multiple Myeloma**

- Patient's IgG level is <200 mg/dL **OR** both of the following
  - Patient has a history of multiple hard to treat infections as indicated by at least **one** of the following:
    - Four or more ear infections within 1 year
    - Two or more serious sinus infections within 1 year
    - Two or more months of antibiotics with little effect
    - Two or more pneumonias within 1 year
    - Recurrent or deep skin abscesses
    - Need for intravenous antibiotics to clear infections
    - Two or more deep-seated infections including septicemia; **AND**
  - The patient has a deficiency in producing antibodies in response to vaccination; **AND**
    - Titers were drawn before challenging with vaccination; **AND**
    - Titers were drawn between 4 and 8 weeks of vaccination

**Note:** other secondary immunodeficiencies resulting in hypogammaglobulinemia and/or B-cellaplasia will be evaluated on a case-by-case basis

## **Toxic Shock Syndrome**

**Note:** Authorization is valid for 1 course (1 month) only and cannot be renewed

## **Management of Immune-Checkpoint-Inhibitor Related Toxicity**

- Patient has been receiving therapy with an immune checkpoint inhibitor (e.g. nivolumab, pembrolizumab, atezolizumab, avelumab, durvalumab, dostarlimab, etc.); **AND**
- Patient has one of the following toxicities related to their immunotherapy:
  - Severe (G3) or life-threatening (G4) bullous dermatitis
  - Stevens-Johnson syndrome (SJS)
  - Toxic epidermal necrolysis (TEN)
  - Severe (G3-4) myasthenia gravis
  - Transverse myelitis
  - Suspected myocarditis if no improvement within 24 hours of starting pulse-dose methylprednisolone
  - Moderate (G2) or severe (G3-4) Guillain-Barre Syndrome or severe (G3-4) peripheral neuropathy used in combination with pulse-dose methylprednisolone
  - Severe (G3-4) pneumonitis if no improvement after 48 hours of methylprednisolone
  - Encephalitis used in combination with pulse-dose methylprednisolone for severe or progressing symptoms or if oligoclonal bands are present
  - Moderate, severe, or life-threatening steroid-refractory myalgias or myositis

## **Management of CAR T-Cell-Related Toxicity**

- Patient has been receiving treatment with anti-CD19 chimeric antigen receptor (CAR) T-cell therapy (e.g., axicabtagene ciloleucel, brexucabtagene autoleucel, lisocabtagene maraleucel, tisagenlecleucel, etc.); **AND**
- Patient has hypogammaglobulinemia as confirmed by serum IgG levels <600 mg/dL; **AND**
- Patient has serious or recurrent infections

## **Renewal Criteria**

Coverage can be renewed based upon the following criteria:

**Note:** unless otherwise specified, renewal authorizations are provided for 1 year

- Patient continues to meet indication-specific relevant criteria identified in initial approval criteria **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include the following: renal dysfunction and acute kidney renal failure, thrombosis, hemolysis, severe hypersensitivity reactions, pulmonary adverse reactions, hyperproteinemia, increased serum viscosity, hyponatremia, aseptic meningitis



syndrome, hypertension, volume overload, etc.; **AND**

- BUN and serum creatinine have been obtained within the last 6 months and the concentration and rate of infusion have been adjusted accordingly; **AND**
- Patient meets the disease-specific criteria identified below:

### **Primary Immunodeficiency (PID)**

- Disease response as evidenced by one or more of the following:
  - Decrease in the frequency of infection
  - Decrease in the severity of infection

### **Chronic Immune Thrombocytopenia/ITP**

- Disease response as indicated by the achievement and maintenance of a platelet count of  $\geq 30 \times 10^9/L$  and at least doubling the baseline platelet count

### **Chronic Inflammatory Demyelinating Polyneuropathy**

- Renewals will be authorized for patients that have demonstrated a clinical response to therapy based on an objective clinical measuring tool (e.g., INCAT, Medical Research Council (MRC) muscle strength, 6-MWT, Rankin, Modified Rankin, etc.)

### **Guillain-Barre Syndrome (Acute inflammatory polyneuropathy)**

- May not be renewed.

### **Multifocal Motor Neuropathy**

- Renewals will be authorized for patients that have demonstrated a clinical response to therapy based on an objective clinical measuring tool (e.g., INCAT, Medical Research Council (MRC) muscle strength, 6-MWT, Rankin, Modified Rankin, etc.)

### **HIV infected children: Bacterial control or prevention**

- Disease response as evidenced by one or more of the following:
  - Decrease in the frequency of infection
  - Decrease in the severity of infection; **AND**
- Patient continues to be at an increased risk of infection necessitating continued therapy as evidenced by an IgG level  $< 400$  mg/dL

### **Myasthenia Gravis**

- May not be renewed.

### **Dermatomyositis/Polymyositis**

- Patient had an improvement from baseline on physical exam and/or muscular strength and function

**\*\*Note:\*\*** Renewal authorizations are provided for 6 months

### **Complications of transplanted solid organ (kidney, liver, lung, heart, pancreas) and bone marrow transplant**

- Disease response as evidenced by one or more of the following:
  - Decrease in the frequency of infection
- Decrease in the severity of infection; **AND**
  - Patient is at a decreased risk of infection as a result of treatment necessitating continued therapy

### **Stiff Person Syndrome**

- Documented improvement from baseline on physical exam

### **Allogeneic Bone Marrow or Stem Cell Transplant**

- Patient's IgG trough is less than 400 mg/dL
- \*\*Note:\*\*** Renewal authorizations are provided for 3 months

### **Kawasaki's Disease**

- May not be renewed.

### **Fetal Alloimmune Thrombocytopenia (FAIT)**

- Authorization is valid through the delivery date only and cannot be renewed

### **Neonatal Alloimmune Thrombocytopenia**

- May not be renewed.

### **Auto-Immune Mucocutaneous Blistering Diseases**

- Documented improvement from baseline on physical exam

**\*\*Note:\*\*** Renewal authorizations are provided for 6 months

### **Acquired Immune Deficiency secondary to Acute Lymphoblastic Leukemia (ALL), Chronic Lymphocytic Leukemia (CLL), or Multiple Myeloma**

- Disease response as evidenced by one or more of the following:
  - Decrease in the frequency of infection
  - Decrease in the severity of infection; **AND**
- Patient is at a decreased risk of infection as a result of treatment necessitating continued therapy

### **Toxic Shock Syndrome**

- May not be renewed.

### **Management of Immune Checkpoint Inhibitor related Toxicity**

- May not be renewed.

### **Management of CAR T-Cell-Related Toxicity**

- Patient is still receiving treatment with anti-CD19 CAR T-cell therapy (e.g., axicabtagene ciloleucel, brexucabtagene autoleucel, lisocabtagene maraleucel, tisagenlecleucel, etc.); **AND**
- Patient has serum IgG levels <600 mg/dl

**Dosage/Administration**

**General Dosing Recommendations:**

- Dosing information is not meant to replace clinical decision making when initiating or modifying medication therapy and should only be used as a guide. Patient-specific variables should be taken into account
- Dosing for IVIG is highly variable depending on numerous patient specific factors, indication(s), and the specific product selected. For specific dosing regimens refer to current prescribing literature.
- Patient’s dose should be reduced to the lowest necessary to maintain benefit for their condition. Patients who are stable, or who have reached the maximum therapeutic response, should have a trial of dose reduction (e.g., 25-50% reduction in dose every 3months).
- Patients who have tolerated dose reduction and continue to show sustained improvement (i.e. remission) should have a trial of treatment discontinuation; withthe following exceptions:
  - PID would be excluded from a trial of discontinuation
  - HIV-infected children should show satisfactory control of the underlying disease [e.g., undetectable viral load, CD4 counts elevated above 200 or >15%(ages 9 months – 5 years) on antiretroviral therapy, etc.]
  - Solid organ transplant, CLL, and MM patients should not be at an increasedrisk of infection

• **Dose Calculations:**

Dosing should be calculated using adjusted body weight if one or more of the following criteria aremet:

- Patient’s body mass index (BMI) is 30 kg/m<sup>2</sup> or more; **OR**
- Patient’s actual body weight is 20% higher than his or her ideal body weight (IBW)
- Calculate the adjusted body weight using the following formulas. Round dose to nearest 5-gram increment in adult patients :\*

<b>Dosing Formulas</b>
BMI = 703 x (weight in pounds/height in inches <sup>2</sup> )
IBW (kg) for males = 50 + [2.3 (height in inches – 60)]
IBW (kg) for females = 45.5 + [2.3 x (height in inches – 60)]
Adjusted body weight = IBW + 0.5 (actual body weight – IBW)

\*The number of billable units approved will be based on calculated doses rounded to the nearest 5-gram increment in adult patients. For pediatric patients, billable units approved will be rounded up to the next commercially available product size.

<b>Intravenous Immune Globulins</b>	
<b>Indication</b>	<b>Dose</b>
Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)	Loading: 2 g/kg given in divided doses over 2 to 5 consecutive days Maintenance: 1 g/kg given as a single dose over 1 day, or equally divided into 2 doses given on 2 consecutive days, every 3 weeks
Primary Immunodeficiency (PID)	Please reference agent-specific dosing recommendations
Chronic Immune Thrombocytopenia/ITP	Please reference agent-specific dosing recommendations
Kawasaki's Disease (PediatricPatients)	1 g/kg to 2 g/kg x 1 course
Multifocal Motor Neuropathy	Up to 2 g/kg divided over 5 days in a 28-day cycle
Acquired immune deficiency: CLL,MM and ALL	400 mg/kg every 3 to 4 weeks
Pediatric HIV	400 mg/kg every 2 to 4 weeks
Guillain-Barre	2 g/kg divided over 5 days x 1 course
Myasthenia Gravis	1-2 g/kg divided as either 0.5 g/kg daily x 2 days or 0.4 g/kg daily x 5days x 1 course
Auto-immune blistering diseases	Up to 2 g/kg divided over 5 days in a 28-day cycle
Dermatomyositis/Polymyositis	2 g/kg divided over 2 to 5 days in a 28-day cycle
Bone Marrow or Stem Cell Transplant	500 mg/kg once weekly x 90 days, then 500 mg/kg every 3 to 4 weeks
Complications of transplanted solid organ: (kidney, liver, lung,heart, pancreas) transplant	2 g/kg divided over 5 days in a 28-day cycle
Stiff Person	2 g/kg divided over 5 days in a 28-day cycle
Toxic shock syndrome	2 g/kg divided over 5 days x 1 course
Neonatal AlloimmuneThrombocytopenia	1 g/kg x 1 dose, may be repeated once if needed
Management of Immune Checkpoint Inhibitor RelatedToxicity	2 g/kg divided over 5 days x 1 course
Management of CAR T-Cell-Related Toxicity	400-500 mg/kg every 28 days

Brand-Specific Information (Intravenous)					
Drug Name	Manufacturer	HCPCS Code	FDA-Approved Indications	IgG Grams per Vial	NDC
Asceniv	ADMA Biologics	J1554	PID	5	69800-0250-XX
Bivigam	ADMA Biologics	J1556	PID	5	69800-6502-XX
				10	69800-6503-XX
Carimune NF	CSL Behring AG	J1566	PID	3	44206-0416-XX
				6	44206-0417-XX
				12	44206-0418-XX
Flebogamma 10% DIF	Instituto Grifols, S.A.	J1572	PID ITP (10%)	5, 10, 20	61953-0005-XX
Flebogamma 5% DIF				0.5, 2.5, 5, 10, 20	61953-0004-XX
Gamunex-C	Grifols Therapeutics	J1561	CIDP ITP PID	1, 2.5, 5, 10, 20, 40	13533-0800-XX
Gammagard Liquid	Baxalta	J1569	MMN PID	1, 2.5, 5, 10, 20, 30	00944-2700-XX
Gammagard S/D	Baxalta	J1566	CLL ITP KD PID	5	00944-2656-XX
				10	00944-2658-XX
Gammaked	Grifols Therapeutics	J1561	CIDP ITP PID	1, 2.5, 5, 10, 20	76125-0900-XX
Gammaplex 5%	Bio Products Laboratory	J1557	ITP PID	5, 10, 20	64208-8234-XX
Gammaplex 10%				5, 10, 20	64208-8235-XX
Octagam 10%	Octapharma USA Inc	J1568	PID (5%) Chronic ITP (10%) Dermatomyositis (10%)	2, 5, 10, 20, 30	68982-0850-XX
Octagam 5%				1, 2.5, 5, 10, 25	68982-0840-XX
Privigen	CSL Behring LLC	J1459	Chronic ITP CIDP PID	5	44206-0436-XX
				10	44206-0437-XX
				20	44206-0438-XX
				40	44206-0439-XX

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Panzyga	Octapharma USA Inc	J1599	Chronic ITP CIDP PID	1, 2.5, 5, 10, 20, 30	68982-0820-XX
Injection, immune globulin, intravenous, non-lyophilized (e.g., liquid), not otherwise specified	N/A	J1599	N/A	N/A	N/A
Siegel, J. Immune Globulins: Therapeutic, Pharmaceutical, Cost and Administration Considerations. Pharmacy Practice News. 2022 Carimune®NF [package insert].					

## References:

1. Bivigam™ [package insert]. Boca Raton, FL; ADMA Biologics, Inc.; July 2019. Accessed September 2021.
2. Carimune®NF [package insert]. Berne, Switzerland; CSL Behring AG; May 2018. Accessed October 2022.
3. Flebogamma® 10% DIF [package insert]. Barcelona, Spain; Instituto Grifols, S.A.; September 2019. Accessed September 2021.
4. Flebogamma® 5% DIF [package insert]. Barcelona, Spain; Instituto Grifols, S.A.; September 2019. Accessed September 2021.
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## Appendix 1 – Covered Diagnosis Codes

ICD-10 Code	ICD-10 Description
A08.0	Rotaviral enteritis
A48.3	Toxic shock syndrome
A49.9	Bacterial infection, unspecified
A87.0	Enteroviral meningitis
A87.8	Other viral meningitis
A87.9	Viral meningitis, unspecified
A88.0	Enteroviral exanthematous fever [Boston exanthem]
A88.8	Other specified viral infections of central nervous system
B20	Human immunodeficiency virus [HIV] disease
B25.0	Cytomegaloviral pneumonitis
C90.00	Multiple myeloma not having achieved remission
C90.01	Multiple myeloma in remission
C90.02	Multiple myeloma in relapse
C91.10	Chronic lymphocytic leukemia of B-cell type not having achieved remission
C91.11	Chronic lymphocytic leukemia of B-cell type in remission
C91.12	Chronic lymphocytic leukemia of B-cell type in relapse
D47.9	Neoplasm of uncertain behavior of lymphoid, hematopoietic and related tissue, unspecified
D69.3	Immune thrombocytopenic purpura
D69.51	Posttransfusion purpura
D69.59	Other secondary thrombocytopenia
D80.0	Hereditary hypogammaglobulinemia
D80.1	Nonfamilial hypogammaglobulinemia
D80.3	Selective deficiency of immunoglobulin G [IgG] subclasses
D80.4	Selective deficiency of immunoglobulin M [IgM]
D80.5	Immunodeficiency with increased immunoglobulin M [IgM]
D80.6	Antibody deficiency with near-normal immunoglobulins or with hyperimmunoglobulinemia
D80.7	Transient hypogammaglobulinemia of infancy
D81.0	Severe combined immunodeficiency [SCID] with reticular dysgenesis
D81.1	Severe combined immunodeficiency [SCID] with low T- and B-cell numbers
D81.2	Severe combined immunodeficiency [SCID] with low or normal B-cell numbers
D81.6	Major histocompatibility complex class I deficiency
D81.7	Major histocompatibility complex class II deficiency
D81.82	Activated Phosphoinositide 3-kinase Delta Syndrome [APDS]
D81.89	Other combined immunodeficiencies
D81.9	Combined immunodeficiency, unspecified
D82.0	Wiskott-Aldrich syndrome
D82.1	Di George's syndrome
D82.4	Hyperimmunoglobulin E [IgE] syndrome
D83.0	Common variable immunodeficiency with predominant abnormalities of B-cell numbers and function
D83.1	Common variable immunodeficiency with predominant immunoregulatory T-cell disorders
D83.2	Common variable immunodeficiency with autoantibodies to B- or T-cells
D83.8	Other common variable immunodeficiencies
D83.9	Common variable immunodeficiency, unspecified

Asceniv (J1554); Bivigam (J1556), Carimune [NF](J1566), Flebogamma (J1572), Gamunex-C (J1561), Gammagard Liquid (J1569), Gammagard S/D (J1566), Gammaked (J1561), Gammaplex (J1557), Intravenous Immune Globulin (J1599), Octagam (J1568), Panzyga (J1576), Privigen (J1459)

D84.81	Immunodeficiency due to conditions classified elsewhere
D84.821	Immunodeficiency due to drugs
D84.822	Immunodeficiency due to external causes
D84.89	Other immunodeficiencies
D89.2	Hypergammaglobulinemia, unspecified
D89.810	Acute graft-versus-host disease
D89.812	Acute on chronic graft-versus-host disease
D89.82	Autoimmune lymphoproliferative syndrome [ALPS]
D89.9	Disorder involving the immune mechanism, unspecified
E05.00	Thyrotoxicosis with diffuse goiter without thyrotoxic crisis or storm
E05.01	Thyrotoxicosis with diffuse goiter with thyrotoxic crisis or storm
E31.0	Autoimmune polyglandular failure
G04.81	Other encephalitis and encephalomyelitis
G04.90	Encephalitis and encephalomyelitis, unspecified
G05.3	Encephalitis and encephalomyelitis in diseases classified elsewhere
G05.4	Myelitis in diseases classified elsewhere
G11.3	Cerebellar ataxia with defective DNA repair
G25.82	Stiff-man syndrome
G35	Multiple sclerosis
G36.0	Neuromyelitis optica [Devic]
G40.811	Lennox-Gastaut syndrome, not intractable, with status epilepticus
G40.812	Lennox-Gastaut syndrome, not intractable, without status epilepticus
G40.813	Lennox-Gastaut syndrome, intractable, with status epilepticus
G40.814	Lennox-Gastaut syndrome, intractable, without status epilepticus
G61.0	Guillain-Barré syndrome
G61.81	Chronic inflammatory demyelinating polyneuritis
G61.89	Other inflammatory polyneuropathies
G61.9	Inflammatory polyneuropathy, unspecified
G62.89	Other specified polyneuropathies
G62.9	Polyneuropathy, unspecified
G65.0	Sequelae of Guillain-Barré syndrome
G70.00	Myasthenia gravis without (acute) exacerbation
G70.01	Myasthenia gravis with (acute) exacerbation
G70.80	Lambert-Eaton syndrome, unspecified
G70.81	Lambert-Eaton syndrome in disease classified elsewhere
G73.1	Lambert-Eaton syndrome in neoplastic disease
H20.00	Unspecified acute and subacute iridocyclitis
H20.011	Primary iridocyclitis, right eye
H20.012	Primary iridocyclitis, left eye
H20.013	Primary iridocyclitis, bilateral
H20.019	Primary iridocyclitis, unspecified eye
H20.021	Recurrent acute iridocyclitis, right eye
H20.022	Recurrent acute iridocyclitis, left eye
H20.023	Recurrent acute iridocyclitis, bilateral
H20.029	Recurrent acute iridocyclitis, unspecified eye
H20.041	Secondary noninfectious iridocyclitis, right eye
H20.042	Secondary noninfectious iridocyclitis, left eye
H20.043	Secondary noninfectious iridocyclitis, bilateral
H20.049	Secondary noninfectious iridocyclitis, unspecified eye
J45.51	Severe persistent asthma with (acute) exacerbation
J45.52	Severe persistent asthma with status asthmaticus
L10.0	Pemphigus vulgaris

Asceniv (J1554); Bivigam (J1556), Carimune [NF](J1566), Flebogamma (J1572), Gamunex-C (J1561), Gammagard Liquid (J1569), Gammagard S/D (J1566), Gammaked (J1561), Gammaplex (J1557), Intravenous Immune Globulin (J1599), Octagam (J1568), Panzyga (J1576), Privigen (J1459)

L10.2	Pemphigus foliaceus
L12.0	Bullous pemphigoid
L12.1	Cicatricial pemphigoid
L12.30	Acquired epidermolysis bullosa, unspecified
L12.35	Other acquired epidermolysis bullosa
L13.8	Other specified bullous disorders
L51.1	Stevens-Johnson syndrome
L51.2	Toxic epidermal necrolysis [Lyell]
L51.3	Stevens-Johnson syndrome-toxic epidermal necrolysis overlap syndrome
M05.00	Felty's syndrome, unspecified site
M05.011	Felty's syndrome, right shoulder
M05.012	Felty's syndrome, left shoulder
M05.019	Felty's syndrome, unspecified shoulder
M05.021	Felty's syndrome, right elbow
M05.022	Felty's syndrome, left elbow
M05.029	Felty's syndrome, unspecified elbow
M05.031	Felty's syndrome, right wrist
M05.032	Felty's syndrome, left wrist
M05.039	Felty's syndrome, unspecified wrist
M05.041	Felty's syndrome, right hand
M05.042	Felty's syndrome, left hand
M05.049	Felty's syndrome, unspecified hand
M05.051	Felty's syndrome, right hip
M05.052	Felty's syndrome, left hip
M05.059	Felty's syndrome, unspecified hip
M05.061	Felty's syndrome, right knee
M05.062	Felty's syndrome, left knee
M05.069	Felty's syndrome, unspecified knee
M05.071	Felty's syndrome, right ankle and foot
M05.072	Felty's syndrome, left ankle and foot
M05.079	Felty's syndrome, unspecified ankle and foot
M05.09	Felty's syndrome, multiple sites
M05.20	Rheumatoid vasculitis with rheumatoid arthritis of unspecified site
M05.211	Rheumatoid vasculitis with rheumatoid arthritis of right shoulder
M05.212	Rheumatoid vasculitis with rheumatoid arthritis of left shoulder
M05.219	Rheumatoid vasculitis with rheumatoid arthritis of unspecified shoulder
M05.221	Rheumatoid vasculitis with rheumatoid arthritis of right elbow
M05.222	Rheumatoid vasculitis with rheumatoid arthritis of left elbow
M05.229	Rheumatoid vasculitis with rheumatoid arthritis of unspecified elbow
M05.231	Rheumatoid vasculitis with rheumatoid arthritis of right wrist
M05.232	Rheumatoid vasculitis with rheumatoid arthritis of left wrist
M05.239	Rheumatoid vasculitis with rheumatoid arthritis of unspecified wrist
M05.241	Rheumatoid vasculitis with rheumatoid arthritis of right hand
M05.242	Rheumatoid vasculitis with rheumatoid arthritis of left hand
M05.249	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hand
M05.251	Rheumatoid vasculitis with rheumatoid arthritis of right hip
M05.252	Rheumatoid vasculitis with rheumatoid arthritis of left hip
M05.259	Rheumatoid vasculitis with rheumatoid arthritis of unspecified hip
M05.261	Rheumatoid vasculitis with rheumatoid arthritis of right knee
M05.262	Rheumatoid vasculitis with rheumatoid arthritis of left knee
M05.269	Rheumatoid vasculitis with rheumatoid arthritis of unspecified knee
M05.271	Rheumatoid vasculitis with rheumatoid arthritis of right ankle and foot

Asceniv (J1554); Bivigam (J1556), Carimune [NF](J1566), Flebogamma (J1572), Gamunex-C (J1561), Gammagard Liquid (J1569), Gammagard S/D (J1566), Gammaked (J1561), Gammaplex (J1557), Intravenous Immune Globulin (J1599), Octagam (J1568), Panzyga (J1576), Privigen (J1459)

M05.272	Rheumatoid vasculitis with rheumatoid arthritis of left ankle and foot
M05.279	Rheumatoid vasculitis with rheumatoid arthritis of unspecified ankle and foot
M05.29	Rheumatoid vasculitis with rheumatoid arthritis of multiple sites
M05.30	Rheumatoid heart disease with rheumatoid arthritis of unspecified site
M05.311	Rheumatoid heart disease with rheumatoid arthritis of right shoulder
M05.312	Rheumatoid heart disease with rheumatoid arthritis of left shoulder
M05.319	Rheumatoid heart disease with rheumatoid arthritis of unspecified shoulder
M05.321	Rheumatoid heart disease with rheumatoid arthritis of right elbow
M05.322	Rheumatoid heart disease with rheumatoid arthritis of left elbow
M05.329	Rheumatoid heart disease with rheumatoid arthritis of unspecified elbow
M05.331	Rheumatoid heart disease with rheumatoid arthritis of right wrist
M05.332	Rheumatoid heart disease with rheumatoid arthritis of left wrist
M05.339	Rheumatoid heart disease with rheumatoid arthritis of unspecified wrist
M05.341	Rheumatoid heart disease with rheumatoid arthritis of right hand
M05.342	Rheumatoid heart disease with rheumatoid arthritis of left hand
M05.349	Rheumatoid heart disease with rheumatoid arthritis of unspecified hand
M05.351	Rheumatoid heart disease with rheumatoid arthritis of right hip
M05.352	Rheumatoid heart disease with rheumatoid arthritis of left hip
M05.359	Rheumatoid heart disease with rheumatoid arthritis of unspecified hip
M05.361	Rheumatoid heart disease with rheumatoid arthritis of right knee
M05.362	Rheumatoid heart disease with rheumatoid arthritis of left knee
M05.369	Rheumatoid heart disease with rheumatoid arthritis of unspecified knee
M05.371	Rheumatoid heart disease with rheumatoid arthritis of right ankle and foot
M05.372	Rheumatoid heart disease with rheumatoid arthritis of left ankle and foot
M05.379	Rheumatoid heart disease with rheumatoid arthritis of unspecified ankle and foot
M05.39	Rheumatoid heart disease with rheumatoid arthritis of multiple sites
M05.40	Rheumatoid myopathy with rheumatoid arthritis of unspecified site
M05.411	Rheumatoid myopathy with rheumatoid arthritis of right shoulder
M05.412	Rheumatoid myopathy with rheumatoid arthritis of left shoulder
M05.419	Rheumatoid myopathy with rheumatoid arthritis of unspecified shoulder
M05.421	Rheumatoid myopathy with rheumatoid arthritis of right elbow
M05.422	Rheumatoid myopathy with rheumatoid arthritis of left elbow
M05.429	Rheumatoid myopathy with rheumatoid arthritis of unspecified elbow
M05.431	Rheumatoid myopathy with rheumatoid arthritis of right wrist
M05.432	Rheumatoid myopathy with rheumatoid arthritis of left wrist
M05.439	Rheumatoid myopathy with rheumatoid arthritis of unspecified wrist
M05.441	Rheumatoid myopathy with rheumatoid arthritis of right hand
M05.442	Rheumatoid myopathy with rheumatoid arthritis of left hand
M05.449	Rheumatoid myopathy with rheumatoid arthritis of unspecified hand
M05.451	Rheumatoid myopathy with rheumatoid arthritis of right hip
M05.452	Rheumatoid myopathy with rheumatoid arthritis of left hip
M05.459	Rheumatoid myopathy with rheumatoid arthritis of unspecified hip
M05.461	Rheumatoid myopathy with rheumatoid arthritis of right knee
M05.462	Rheumatoid myopathy with rheumatoid arthritis of left knee
M05.469	Rheumatoid myopathy with rheumatoid arthritis of unspecified knee
M05.471	Rheumatoid myopathy with rheumatoid arthritis of right ankle and foot
M05.472	Rheumatoid myopathy with rheumatoid arthritis of left ankle and foot
M05.479	Rheumatoid myopathy with rheumatoid arthritis of unspecified ankle and foot
M05.49	Rheumatoid myopathy with rheumatoid arthritis of multiple sites
M05.50	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified site
M05.511	Rheumatoid polyneuropathy with rheumatoid arthritis of right shoulder



M05.512	Rheumatoid polyneuropathy with rheumatoid arthritis of left shoulder
M05.519	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified shoulder
M05.521	Rheumatoid polyneuropathy with rheumatoid arthritis of right elbow
M05.522	Rheumatoid polyneuropathy with rheumatoid arthritis of left elbow
M05.529	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified elbow
M05.531	Rheumatoid polyneuropathy with rheumatoid arthritis of right wrist
M05.532	Rheumatoid polyneuropathy with rheumatoid arthritis of left wrist
M05.539	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified wrist
M05.541	Rheumatoid polyneuropathy with rheumatoid arthritis of right hand
M05.542	Rheumatoid polyneuropathy with rheumatoid arthritis of left hand
M05.549	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hand
M05.551	Rheumatoid polyneuropathy with rheumatoid arthritis of right hip
M05.552	Rheumatoid polyneuropathy with rheumatoid arthritis of left hip
M05.559	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified hip
M05.561	Rheumatoid polyneuropathy with rheumatoid arthritis of right knee
M05.562	Rheumatoid polyneuropathy with rheumatoid arthritis of left knee
M05.569	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified knee
M05.571	Rheumatoid polyneuropathy with rheumatoid arthritis of right ankle and foot
M05.572	Rheumatoid polyneuropathy with rheumatoid arthritis of left ankle and foot
M05.579	Rheumatoid polyneuropathy with rheumatoid arthritis of unspecified ankle and foot
M05.59	Rheumatoid polyneuropathy with rheumatoid arthritis of multiple sites
M05.60	Rheumatoid arthritis of unspecified site with involvement of other organs and systems
M05.611	Rheumatoid arthritis of right shoulder with involvement of other organs and systems
M05.612	Rheumatoid arthritis of left shoulder with involvement of other organs and systems
M05.619	Rheumatoid arthritis of unspecified shoulder with involvement of other organs and systems
M05.621	Rheumatoid arthritis of right elbow with involvement of other organs and systems
M05.622	Rheumatoid arthritis of left elbow with involvement of other organs and systems
M05.629	Rheumatoid arthritis of unspecified elbow with involvement of other organs and systems
M05.631	Rheumatoid arthritis of right wrist with involvement of other organs and systems
M05.632	Rheumatoid arthritis of left wrist with involvement of other organs and systems
M05.639	Rheumatoid arthritis of unspecified wrist with involvement of other organs and systems
M05.641	Rheumatoid arthritis of right hand with involvement of other organs and systems
M05.642	Rheumatoid arthritis of left hand with involvement of other organs and systems
M05.649	Rheumatoid arthritis of unspecified hand with involvement of other organs and systems
M05.651	Rheumatoid arthritis of right hip with involvement of other organs and systems
M05.652	Rheumatoid arthritis of left hip with involvement of other organs and systems
M05.659	Rheumatoid arthritis of unspecified hip with involvement of other organs and systems
M05.661	Rheumatoid arthritis of right knee with involvement of other organs and systems
M05.662	Rheumatoid arthritis of left knee with involvement of other organs and systems

Asceniv (J1554); Bivigam (J1556), Carimune [NF](J1566), Flebogamma (J1572), Gamunex-C (J1561), Gammagard Liquid (J1569), Gammagard S/D (J1566), Gammaked (J1561), Gammaplex (J1557), Intravenous Immune Globulin (J1599), Octagam (J1568), Panzyga (J1576), Privigen (J1459)

M05.669	Rheumatoid arthritis of unspecified knee with involvement of other organs and systems
M05.671	Rheumatoid arthritis of right ankle and foot with involvement of other organs and systems
M05.672	Rheumatoid arthritis of left ankle and foot with involvement of other organs and systems
M05.679	Rheumatoid arthritis of unspecified ankle and foot with involvement of other organs and systems
M05.69	Rheumatoid arthritis of multiple sites with involvement of other organs and systems
M05.70	Rheumatoid arthritis with rheumatoid factor of unspecified site without organ or systems involvement
M05.711	Rheumatoid arthritis with rheumatoid factor of right shoulder without organ or systems involvement
M05.712	Rheumatoid arthritis with rheumatoid factor of left shoulder without organ or systems involvement
M05.719	Rheumatoid arthritis with rheumatoid factor of unspecified shoulder without organ or systems involvement
M05.7A	Rheumatoid arthritis with rheumatoid factor of other specified site without organ or systems involvement
M06.1	Adult-onset Still's disease
M08.00	Unspecified juvenile rheumatoid arthritis of unspecified site
M08.011	Unspecified juvenile rheumatoid arthritis, right shoulder
M08.012	Unspecified juvenile rheumatoid arthritis, left shoulder
M08.019	Unspecified juvenile rheumatoid arthritis, unspecified shoulder
M08.021	Unspecified juvenile rheumatoid arthritis, right elbow
M08.022	Unspecified juvenile rheumatoid arthritis, left elbow
M08.029	Unspecified juvenile rheumatoid arthritis, unspecified elbow
M08.031	Unspecified juvenile rheumatoid arthritis, right wrist
M08.032	Unspecified juvenile rheumatoid arthritis, left wrist
M08.039	Unspecified juvenile rheumatoid arthritis, unspecified wrist
M08.041	Unspecified juvenile rheumatoid arthritis, right hand
M08.042	Unspecified juvenile rheumatoid arthritis, left hand
M08.049	Unspecified juvenile rheumatoid arthritis, unspecified hand
M08.051	Unspecified juvenile rheumatoid arthritis, right hip
M08.052	Unspecified juvenile rheumatoid arthritis, left hip
M08.059	Unspecified juvenile rheumatoid arthritis, unspecified hip
M08.061	Unspecified juvenile rheumatoid arthritis, right knee
M08.062	Unspecified juvenile rheumatoid arthritis, left knee
M08.069	Unspecified juvenile rheumatoid arthritis, unspecified knee
M08.071	Unspecified juvenile rheumatoid arthritis, right ankle and foot
M08.072	Unspecified juvenile rheumatoid arthritis, left ankle and foot
M08.079	Unspecified juvenile rheumatoid arthritis, unspecified ankle and foot
M08.08	Unspecified juvenile rheumatoid arthritis, vertebrae
M08.09	Unspecified juvenile rheumatoid arthritis, multiple sites
M08.0A	Unspecified juvenile rheumatoid arthritis, other specified site
M08.20	Juvenile rheumatoid arthritis with systemic onset, unspecified site
M08.211	Juvenile rheumatoid arthritis with systemic onset, right shoulder
M08.212	Juvenile rheumatoid arthritis with systemic onset, left shoulder
M08.219	Juvenile rheumatoid arthritis with systemic onset, unspecified shoulder
M08.221	Juvenile rheumatoid arthritis with systemic onset, right elbow
M08.222	Juvenile rheumatoid arthritis with systemic onset, left elbow

Asceniv (J1554); Bivigam (J1556), Carimune [NF](J1566), Flebogamma (J1572), Gamunex-C (J1561), Gammagard Liquid (J1569), Gammagard S/D (J1566), Gammaked (J1561), Gammaplex (J1557), Intravenous Immune Globulin (J1599), Octagam (J1568), Panzyga (J1576), Privigen (J1459)

Mo8.229	Juvenile rheumatoid arthritis with systemic onset, unspecified elbow
Mo8.231	Juvenile rheumatoid arthritis with systemic onset, right wrist
Mo8.232	Juvenile rheumatoid arthritis with systemic onset, left wrist
Mo8.239	Juvenile rheumatoid arthritis with systemic onset, unspecified wrist
Mo8.241	Juvenile rheumatoid arthritis with systemic onset, right hand
Mo8.242	Juvenile rheumatoid arthritis with systemic onset, left hand
Mo8.249	Juvenile rheumatoid arthritis with systemic onset, unspecified hand
Mo8.251	Juvenile rheumatoid arthritis with systemic onset, right hip
Mo8.252	Juvenile rheumatoid arthritis with systemic onset, left hip
Mo8.259	Juvenile rheumatoid arthritis with systemic onset, unspecified hip
Mo8.261	Juvenile rheumatoid arthritis with systemic onset, right knee
Mo8.262	Juvenile rheumatoid arthritis with systemic onset, left knee
Mo8.269	Juvenile rheumatoid arthritis with systemic onset, unspecified knee
Mo8.271	Juvenile rheumatoid arthritis with systemic onset, right ankle and foot
Mo8.272	Juvenile rheumatoid arthritis with systemic onset, left ankle and foot
Mo8.279	Juvenile rheumatoid arthritis with systemic onset, unspecified ankle and foot
Mo8.28	Juvenile rheumatoid arthritis with systemic onset, vertebrae
Mo8.29	Juvenile rheumatoid arthritis with systemic onset, multiple sites
Mo8.2A	Juvenile rheumatoid arthritis with systemic onset, other specified site
Mo8.3	Juvenile rheumatoid polyarthritis (seronegative)
Mo8.40	Pauciarticular juvenile rheumatoid arthritis, unspecified site
Mo8.411	Pauciarticular juvenile rheumatoid arthritis, right shoulder
Mo8.412	Pauciarticular juvenile rheumatoid arthritis, left shoulder
Mo8.419	Pauciarticular juvenile rheumatoid arthritis, unspecified shoulder
Mo8.421	Pauciarticular juvenile rheumatoid arthritis, right elbow
Mo8.422	Pauciarticular juvenile rheumatoid arthritis, left elbow
Mo8.429	Pauciarticular juvenile rheumatoid arthritis, unspecified elbow
Mo8.431	Pauciarticular juvenile rheumatoid arthritis, right wrist
Mo8.432	Pauciarticular juvenile rheumatoid arthritis, left wrist
Mo8.439	Pauciarticular juvenile rheumatoid arthritis, unspecified wrist
Mo8.441	Pauciarticular juvenile rheumatoid arthritis, right hand
Mo8.442	Pauciarticular juvenile rheumatoid arthritis, left hand
Mo8.449	Pauciarticular juvenile rheumatoid arthritis, unspecified hand
Mo8.451	Pauciarticular juvenile rheumatoid arthritis, right hip
Mo8.452	Pauciarticular juvenile rheumatoid arthritis, left hip
Mo8.459	Pauciarticular juvenile rheumatoid arthritis, unspecified hip
Mo8.461	Pauciarticular juvenile rheumatoid arthritis, right knee
Mo8.462	Pauciarticular juvenile rheumatoid arthritis, left knee
Mo8.469	Pauciarticular juvenile rheumatoid arthritis, unspecified knee
Mo8.471	Pauciarticular juvenile rheumatoid arthritis, right ankle and foot
Mo8.472	Pauciarticular juvenile rheumatoid arthritis, left ankle and foot
Mo8.479	Pauciarticular juvenile rheumatoid arthritis, unspecified ankle and foot
Mo8.48	Pauciarticular juvenile rheumatoid arthritis, vertebrae
Mo8.4A	Pauciarticular juvenile rheumatoid arthritis, other specified site
Mo8.80	Other juvenile arthritis, unspecified site
Mo8.811	Other juvenile arthritis, right shoulder
Mo8.812	Other juvenile arthritis, left shoulder
Mo8.819	Other juvenile arthritis, unspecified shoulder
Mo8.821	Other juvenile arthritis, right elbow
Mo8.822	Other juvenile arthritis, left elbow
Mo8.829	Other juvenile arthritis, unspecified elbow

Mo8.831	Other juvenile arthritis, right wrist
Mo8.832	Other juvenile arthritis, left wrist
Mo8.839	Other juvenile arthritis, unspecified wrist
Mo8.841	Other juvenile arthritis, right hand
Mo8.842	Other juvenile arthritis, left hand
Mo8.849	Other juvenile arthritis, unspecified hand
Mo8.851	Other juvenile arthritis, right hip
Mo8.852	Other juvenile arthritis, left hip
Mo8.859	Other juvenile arthritis, unspecified hip
Mo8.861	Other juvenile arthritis, right knee
Mo8.862	Other juvenile arthritis, left knee
Mo8.869	Other juvenile arthritis, unspecified knee
Mo8.871	Other juvenile arthritis, right ankle and foot
Mo8.872	Other juvenile arthritis, left ankle and foot
Mo8.879	Other juvenile arthritis, unspecified ankle and foot
Mo8.88	Other juvenile arthritis, vertebrae
Mo8.89	Other juvenile arthritis, multiple sites
Mo8.90	Juvenile arthritis, unspecified, unspecified site
Mo8.911	Juvenile arthritis, unspecified, right shoulder
Mo8.912	Juvenile arthritis, unspecified, left shoulder
Mo8.919	Juvenile arthritis, unspecified, unspecified shoulder
Mo8.921	Juvenile arthritis, unspecified, right elbow
Mo8.922	Juvenile arthritis, unspecified, left elbow
Mo8.929	Juvenile arthritis, unspecified, unspecified elbow
Mo8.931	Juvenile arthritis, unspecified, right wrist
Mo8.932	Juvenile arthritis, unspecified, left wrist
Mo8.939	Juvenile arthritis, unspecified, unspecified wrist
Mo8.941	Juvenile arthritis, unspecified, right hand
Mo8.942	Juvenile arthritis, unspecified, left hand
Mo8.949	Juvenile arthritis, unspecified, unspecified hand
Mo8.951	Juvenile arthritis, unspecified, right hip
Mo8.952	Juvenile arthritis, unspecified, left hip
Mo8.959	Juvenile arthritis, unspecified, unspecified hip
Mo8.961	Juvenile arthritis, unspecified, right knee
Mo8.962	Juvenile arthritis, unspecified, left knee
Mo8.969	Juvenile arthritis, unspecified, unspecified knee
Mo8.971	Juvenile arthritis, unspecified, right ankle and foot
Mo8.972	Juvenile arthritis, unspecified, left ankle and foot
Mo8.979	Juvenile arthritis, unspecified, unspecified ankle and foot
Mo8.98	Juvenile arthritis, unspecified, vertebrae
Mo8.99	Juvenile arthritis, unspecified, multiple sites
Mo8.9A	Juvenile arthritis, unspecified, other specified site
M30.3	Mucocutaneous lymph node syndrome [Kawasaki]
M33.00	Juvenile dermatomyositis, organ involvement unspecified
M33.01	Juvenile dermatomyositis with respiratory involvement
M33.02	Juvenile dermatomyositis with myopathy
M33.03	Juvenile dermatomyositis without myopathy
M33.09	Juvenile dermatomyositis with other organ involvement
M33.10	Other dermatomyositis, organ involvement unspecified
M33.11	Other dermatomyositis with respiratory involvement
M33.12	Other dermatomyositis with myopathy
M33.13	Other dermatomyositis without myopathy

M33.19	Other dermatomyositis with other organ involvement
M33.20	Polymyositis, organ involvement unspecified
M33.21	Polymyositis with respiratory involvement
M33.22	Polymyositis with myopathy
M33.29	Polymyositis with other organ involvement
M33.90	Dermatopolymyositis, unspecified, organ involvement unspecified
M33.91	Dermatopolymyositis, unspecified with respiratory involvement
M33.92	Dermatopolymyositis, unspecified with myopathy
M33.93	Dermatopolymyositis, unspecified without myopathy
M33.99	Dermatopolymyositis, unspecified with other organ involvement
M36.0	Dermato(poly)myositis in neoplastic disease
O26.40	Herpes gestationis, unspecified trimester
O26.41	Herpes gestationis, first trimester
O26.42	Herpes gestationis, second trimester
O26.43	Herpes gestationis, third trimester
P61.0	Transient neonatal thrombocytopenia
T86.00	Unspecified complication of bone marrow transplant
T86.01	Bone marrow transplant rejection
T86.02	Bone marrow transplant failure
T86.03	Bone marrow transplant infection
T86.09	Other complications of bone marrow transplant
T86.10	Unspecified complication of kidney transplant
T86.11	Kidney transplant rejection
T86.12	Kidney transplant failure
T86.13	Kidney transplant infection
T86.19	Other complication of kidney transplant
Z29.89	Encounter for other specified prophylactic measures
Z29.9	Encounter for prophylactic measures, unspecified
Z48.290	Encounter for aftercare following bone marrow transplant
Z86.19	Personal history of other infectious and parasitic diseases
Z86.2	Personal history of diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
Z92.22	Personal history of monoclonal drug therapy
Z92.29	Personal history of other drug therapy
Z94.81	Bone marrow transplant status
Z94.84	Stem cells transplant status