SCIG (immune globulin SQ): Cutaquig®, Cuvitru®, Gammagard Liquid®, Gammagard Liquid ERC®, Gammaked™, Gamunex®-C, Hizentra®, HyQvia®, Xembify® (Subcutaneous)

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I. Length of Authorization

- Initial: Prior authorization validity will be provided initially for 6 months (180 days).
- Renewal: Prior authorization validity may be renewed every 12 months (365 days) thereafter.

II. Dosing Limits

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

Drug Name	Billable units/28 days
Hizentra	• 1840 (CIDP) • 920 (CAR T-Cell and Lymphocyte Engager-Related Toxicities) • 1680 (All other indications)
Gamunex-C, Gammaked, & Gammagard liquid/ERC	• 184 (CAR T-Cell and Lymphocyte Engager -Related Toxicities) • 336 (All other indications)
Cuvitru & Cutaquig	• 920 (CAR T-Cell and Lymphocyte Engager-Related Toxicities) • 1600 (All other indications)

Drug Name	Loading Dose Billable units	Maintenance Dose Billable units/21 days
HyQvia (CIDP)	Week 1: 0 Week 2: 400 Week 3: 400 Week 4: 800 Week 6: 1200 Week 9: 1600	1600

HyQvia (CAR T-Cell and Lymphocyte Engager-Related Toxicities)	N/A	690
HyQvia (All other indications)	Week 1: 300 Week 2: 600 Week 4: 900	1200
Xembify (CAR T-Cell and Lymphocyte Engager-Related Toxicities)	N/A	690
Xembify (All other indications)	180 daily for 5 days	1680

Max Units (per dose and over time) [HCPCS Unit] – *EFFECTIVE 01/01/2027*:

Drug Name	Billable units/28 days
Gamunex-C, Gammaked, & Gammagard liquid/ERC	• 460 (CAR T-Cell and Lymphocyte Engager -Related Toxicities) • 840 (All other indications)

III. Initial Approval Criteria [1-9,13,16,19]

Prior authorization validity is provided in the following conditions:

- Baseline values for BUN and serum creatinine obtained within 30 days of request; **AND**

Primary Immunodeficiency (PID) † [1-9, 12,13,19,35,41,42]

Such as: Wiskott -Aldrich syndrome, 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]***

- Member is at least 2 years of age; **AND**
  - Member has an IgG level <200 mg/dL; **OR**
  - Member meets both of the following:
    - Member 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, deep skin or organ abscesses

- Persistent thrush in the mouth or fungal infection on the skin
- Need for intravenous antibiotics to clear infections
- Two or more deep-seated infections including septicemia
- Family history of PID; **AND**

▪ The member 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; **OR**

o Used as supportive care during treatment with etuvetidigene autotemcel for Wiskott-Aldrich syndrome

Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) [Hizentra and HyQvia ONLY] † Φ [3,4,22,36]

- Member is at least 18 years of age; **AND**
- Physician has assessed baseline disease severity utilizing an objective measure/tool (e.g., INCAT, Medical Research Council (MRC) muscle strength, 6-MWT, Rankin, Modified Rankin, etc.); **AND**
  - Used as initial maintenance therapy for prevention of disease relapses after treatment and stabilization with intravenous immunoglobulin (IVIG)**§**; **OR**
  - Used for re-initiation of maintenance therapy after experiencing a relapse and requiring re-induction therapy with IVIG (see Section IV for criteria)

***§** Refer to the IVIG (immune globulin IV) medical necessity criteria (Document Number: IC-0071) for the relevant intravenous criteria requirements*

Acquired Immune Deficiency Secondary to Chronic Lymphocytic Leukemia (CLL)/ Small Lymphocytic Lymphoma (SLL) ‡ [31,32,35]

- Member has an IgG level <200 mg/dL; **OR**
- Member has an IgG level <500 mg/dL**; AND**
  - Member has recurrent sinopulmonary infections requiring IV antibiotics or hospitalization; **OR**
- Member meets both of the following:
  - Member 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, deep skin or organ abscesses
    - Persistent thrush in the mouth or fungal infection on the skin
    - Need for intravenous antibiotics to clear infections

        - Two or more deep-seated infections including septicemia; **AND**
    - The member 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-cell aplasia will be evaluated on a case-by-case basis

Management of Chimeric Antigen Receptor (CAR) T-Cell and Lymphocyte Engager-Related Toxicities ‡ [39,40]

- Member has received treatment with anti-CD19 CAR T-cell therapy; **AND**
    - Member has hypogammaglobulinemia as confirmed by serum IgG levels <600 mg/dL and serious or recurrent infections; **OR**
- Member has received treatment with Bispecific T-Cell Engager (BiTE) therapy for a B-Cell Lymphoma; **AND**
    - Member has hypogammaglobulinemia as confirmed by serum IgG levels <400 mg/dL and recurrent, persistent, or severe infections

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); Φ Orphan Drug

IV. Renewal Criteria [1-9,16,19,31,32,41,42]

Prior authorization validity may be renewed based upon the following criteria:

- Member continues to meet the indication-specific relevant criteria identified in section III; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: severe hypersensitivity/anaphylaxis, thrombosis, aseptic meningitis syndrome, hemolytic anemia, hyperproteinemia, acute lung injury, etc.; **AND**
- BUN and serum creatinine obtained within the last 6 months and the concentration and rate of infusion have been adjusted accordingly; **AND**

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; **AND**
- For Wiskott-Aldrich syndrome post-administration of etuvetidigene autotemcel, continued treatment with immunoglobulin therapy is required for members without adequate immune recovery (e.g., IgG level <5 g/L, inadequate levels of B cells in the peripheral blood, presence of symptoms of infections, etc.)

Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) [Hizentra and HyQvia ONLY]

- Renewals will be authorized for members that have demonstrated a beneficial clinical response to maintenance therapy, without relapses, based on an objective clinical measuring tool (e.g., INCAT, Medical Research Council (MRC) muscle strength, 6-MWT, Rankin, Modified Rankin, etc.); **OR**
- Member is re-initiating maintenance therapy after experiencing a relapse while on Hizentra or HyQvia; **AND**
  - Member improved and stabilized on IVIG treatment: **AND**
  - Member was NOT receiving maximum dosing of Hizentra or HyQvia prior to relapse

Acquired Immune Deficiency secondary to Chronic Lymphocytic Leukemia (CLL)/ Small Lymphocytic Lymphoma (SLL)

- Disease response as evidenced by one or more of the following:
  - Decrease in the frequency of infection
  - Decrease in the severity of infection; **AND**
- Continued treatment is necessary to decrease the risk of infection

Management of CAR T-Cell and Lymphocyte Engager-Related Toxicities

- Member has received treatment with anti-CD19 CAR T-cell therapy; **AND**
  - Member has serum IgG levels <600 mg/dL; **OR**
- Member has received treatment with BiTE therapy; **AND**
  - Member has serum IgG levels <400 mg/dL

V. Dosage/Administration[1-9,14-16,31-34,40]

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

- Member's body mass index (BMI) is 30 kg/m2 or more; **OR**
- Member's actual body weight is 20% higher than his or her ideal body weight (IBW)

Use the following dosing formulas to calculate the adjusted body weight (round dose to nearest 5 gram increment in adult members)
Dosing formulas
BMI = 703 x (weight in pounds/height in inches^2)
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 + 0.4 (actual body weight – IBW)

This information is not meant to replace clinical decision making when initiating or modifying medication therapy and should only be used as a guide. Member-specific variables should be taken into account.

<table>
<tr><th>Indication</th><th>Dose ❖</th></tr>
<tr><td>Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)</td><td>
<u>Hizentra:</u>

Initiate therapy 1 week after the last IVIG dose
The recommended subcutaneous dose is 0.2 g/kg (1 mL/kg) body weight per week, administered in 1 or 2 sessions over 1 or 2 consecutive days.
If CIDP symptoms worsen, consider increasing the dose to 0.4 g/kg (2 mL/kg) body weight per week, administered in 2 sessions over 1 or 2 consecutive days.
If CIDP symptoms worsen on the 0.4 g/kg body weight per week dose, consider re-initiating therapy with an IVIG product while discontinuing Hizentra.

<u>HyQvia:</u>

Members must be on stable doses of IVIG prior to starting HyQvia.
Before initiating therapy with HyQvia, calculate the weekly equivalent dose to plan for the ramp-up schedule (see table below): previous IVIG dose (g)/number of weeks between IVIG doses
The starting dose and dosing frequency of HyQvia is the same as the member's previous IVIG treatment.
The typical dosing interval range in the clinical trial for HyQvia was 4 weeks. For members with less frequent IVIG dosing (greater than 4 weeks), the dosing interval can be converted to 3 or 4 weeks while maintaining the same monthly equivalent IgG dose.
Administer the calculated one-week dose (1st infusion) 2 weeks after the last IVIG infusion. One week after the first HyQvia dose, administer another weekly equivalent dose (2nd infusion).
A ramp-up period can take up to 9 weeks, depending on the dosing interval and tolerability (see table below)

<table>
<tr><th colspan="3">HyQvia Dose Ramp-up Schedule</th></tr>
<tr><th>Week*</th><th>Infusion Number</th><th>Dose Interval</th></tr>
<tr><td>1</td><td>No infusion</td><td>Not applicable</td></tr>
<tr><td>2</td><td>1st infusion</td><td>1-week-dose</td></tr>
<tr><td>3</td><td>2nd infusion</td><td>1-week-dose</td></tr>
<tr><td>4</td><td>3rd infusion</td><td>2-week-dose</td></tr>
<tr><td>5</td><td>No infusion</td><td>Not applicable</td></tr>
<tr><td>6</td><td>4th infusion</td><td>3-week-dose</td></tr>
<tr><td>7</td><td>No infusion</td><td>Not applicable</td></tr>
<tr><td>8</td><td>No infusion</td><td>Not applicable</td></tr>
<tr><td>9</td><td>5th infusion</td><td>4-week-dose</td></tr>
</table>
*Clock starts one week after the last IVIG dose is administered. Week 1 is the week that starts one week after the last IVIG dose.
</td></tr>
<tr><td>Primary Immune Deficiency (PID)
AND</td><td>
<u>Hizentra:</u>

Switching from IVIG

Initiate therapy 1 to 2 weeks after the last IVIG dose
Weekly dose: 1.37*(previous IVIG dose (g)/number of weeks between IVIG

</td></tr>
</table>

<table>
<tr><th>Indication</th><th>Dose ❖</th></tr>
<tr><td rowspan="3">Acquired Immune Deficiency secondary to Chronic Lymphocytic Leukemia (CLL)/Small Lymphocytic Lymphoma (SLL)</td><td>doses)
○ May be administered from daily up to every two weeks (biweekly)
○ Biweekly dose: twice the weekly dose (using calculation above)
○ Frequent dosing (2-7 times per week): divide the calculated weekly dose by the desired number of times per week
▪ Switching from SCIG
○ Initiate therapy 1 week after the last SCIG dose
○ Weekly dose (in grams) should be same as the weekly dose of prior SCIG treatment (in grams)
○ Biweekly dose: multiply the prior weekly dose by 2
○ Frequent dosing (2-7 times per week): divide the prior weekly dose by the desired number of times per week</td></tr>
<tr><td><u>Gamunex-C/Gammaked/Gammagard Liquid/Gammagard Liquid ERC:</u>
▪ Switching from IVIG
○ Initiate therapy 1 week after the last IVIG dose
○ Weekly dose: 1.37*(previous IVIG dose(g)/number of weeks between IVIG doses)</td></tr>
<tr><td><u>HyQvia</u>:
▪ Naïve to immune globulin treatment or switching from SCIG: 300 to 600 mg/kg at 3 to 4 week intervals after initial ramp-up (see table below)
▪ Switching from IVIG: use the same dose and frequency as the previous IV treatment after initial ramp-up (see table below)
NOTE: For members previously on another IgG treatment, initiate therapy 1 week after the last infusion of IVIG or SCIG
<table>
<tr><th colspan="4">HyQvia Initial Treatment Interval/Dosage Ramp-up Schedule</th></tr>
<tr><th>Week</th><th>Infusion</th><th>3-week treatment</th><th>4-week treatment interval</th></tr>
<tr><td>1</td><td>1st infusion</td><td>Dose in Grams X 0.33</td><td>Dose in Grams X 0.25</td></tr>
<tr><td>2</td><td>2nd infusion</td><td>Dose in Grams X 0.67</td><td>Dose in Grams X 0.50</td></tr>
<tr><td>4</td><td>3rd infusion</td><td>Total Dose in Grams</td><td>Dose in Grams X 0.75</td></tr>
<tr><td>7</td><td>4th infusion</td><td>Total Dose in Grams</td><td>Total Dose in Grams</td></tr>
</table></td></tr>
<tr><td><u>Xembify:</u>
▪ Switching from IVIG
○ Start treatment one week after the last IVIG infusion.
○ Weekly dose: 1.37*[previous monthly (or every 3- week) IVIG dose in grams/number of weeks between IVIG doses]
○ May be administered from daily up to every two weeks (biweekly)
○ Biweekly dose: multiply the prior weekly dose by 2
○ Frequent dosing (2-7 times per week): divide the prior weekly dose by the desired number of times per week</td></tr>
</table>

Indication	Dose ❖
	▪ Switching from SCIG ○ Weekly dose (in grams) should be same as the weekly dose of prior SCIG treatment (in grams) ○ May be administered from daily up to every two weeks (biweekly) ○ Biweekly dose: multiply the prior weekly dose by 2 ○ Frequent dosing (2-7 times per week): divide the prior weekly dose by the desired number of times per week ▪ Treatment naïve ○ Loading dose: 150 mg/kg/day for 5 consecutive days ○ Maintenance dose: 150 mg/kg/week - weekly administrations starts at Day 8 ○ May be administered from daily up to every two weeks (biweekly)
	Cuvitru: ▪ Switching from IVIG or HyQvia ○ Initiate therapy 1 week after the last IVIG or Hyqvia dose ○ Weekly dose: 1.30*(previous IVIG or HyQvia dose (g)/number of weeks between IVIG or HyQvia doses) ○ May be administered from daily up to every two weeks (biweekly) ○ Biweekly dose: twice the weekly dose (using calculation above) ○ Frequent dosing (2-7 times per week): divide the calculated weekly dose by the desired number of times per week ▪ Switching from SCIG ○ Weekly dose (in grams) should be same as the weekly dose of prior SCIG treatment (in grams) ○ May be administered from daily up to every two weeks (biweekly) ○ Biweekly dose: multiply the prior weekly dose by 2 ○ Frequent dosing (2-7 times per week): divide the prior weekly dose by the desired number of times per week
	Cutaquig: ▪ Switching from IVIG ○ Weekly dose: 1.30*(previous IVIG dose (g)/number of weeks between IVIG doses) ○ May be administered from daily up to every two weeks (biweekly) ○ Biweekly dose: multiply the calculated weekly dose by 2 ○ Frequent dosing (2-7 times per week): divide the calculated weekly dose by the desired number of times per week ▪ Switching from SCIG ○ Weekly dose (in grams) should be same as the weekly dose of prior SCIG treatment (in grams) ○ May be administered from daily up to every two weeks (biweekly) ○ Biweekly dose: multiply the prior weekly dose by 2 ○ Frequent dosing (2-7 times per week): divide the prior weekly dose by the desired

Indication	Dose ❖
	number of times per week
Management of CAR T-Cell and Lymphocyte Engager-Related Toxicities	• Administer SCIG replacement therapy 100-200 mg/kg weekly

❖ *Dosing for immunoglobulin products is highly variable depending on numerous member specific factors, indication(s), and the specific product selected. For specific dosing regimens refer to current prescribing literature.*

VI. Billing Code/Availability Information

HCPCS Code(s) & NDC(s):

Drug Name	Manufacturer	HCPCS Code	1 Billable unit	NDC	IgG (grams) per vial/syringe	Volume (mL)
Hizentra 20%* (Vials)	CSL Behring AG	J1559 – Injection, immune globulin (hizentra), 100 mg	100 mg	44206-0451-01	1	5
				44206-0452-02	2	10
				44206-0454-04	4	20
				44206-0455-10	10	50
Hizentra 20%* (Prefilled Syringes)	CSL Behring AG	J1559 – Injection, immune globulin (Hizentra), 100 mg	100 mg	44206-0456-21	1	5
				44206-0457-22	2	10
				44206-0458-24	4	20
				44206-0455-25	10	50
Gammaked 10%*	Grifols Therapeutics	J1561 – Injection, immune globulin, (gamunex-c/ gammaked), non-lyophilized (e.g., liquid), 500 mg *(Discontinue use on 01/01/2027)* J1583 – Injection, immune globulin (gamunex-c/gammaked), 200 mg *(Effective 01/01/2027)*	500 mg *(Discontinue use on 01/01/2027)* 200 mg *(Effective 01/01/2027)*	76125-0900-01	1	10
				76125-0900-25	2.5	25
				76125-0900-50	5	50
				76125-0900-10	10	100
				76125-0900-20	20	200
Gamunex-C 10%*	Grifols Therapeutics	J1561 – Injection, immune globulin, (gamunex-c/gammaked), non-lyophilized (e.g., liquid), 500 mg *(Discontinue use on 01/01/2027)*	500 mg *(Discontinue use on 01/01/2027)*	13533-0800-12	1	10
				13533-0800-15	2.5	25
				13533-0800-20	5	50
				13533-0800-71	10	100
				13533-0800-24	20	200

Drug Name	Manufacturer	HCPCS Code	1 Billable unit	NDC	IgG (grams) per vial/syringe	Volume (mL)
		J1583 – Injection, immune globulin	200 mg *(Effective 01/01/2027)*	13533-0800-40	40	400
Gammagard Liquid ERC	Takeda Pharmaceuticals U.S.A., Inc.	J1569 – Injection, immune globulin, (gammagard liquid/gammagard liquid Erc), 500 mg *(Discontinue use on 01/01/2027)* J1586 – Injection, immune globulin (gammagard liquid/gammagard liquid erc), 200 mg *(Effective 01/01/2027)*	500 mg *(Discontinue use on 01/01/2027)*	00944-2705-50	5	50
			200 mg *(Effective 01/01/2027)*	00944-2705-10	10	100
Gammagard Liquid 10%*	Takeda Pharmaceuticals U.S.A., Inc.	J1569 – Injection, immune globulin, (gammagard liquid/gammagard liquid Erc), 500 mg *(Discontinue use on 01/01/2027)* J1586 – Injection, immune globulin (gammagard liquid/gammagard liquid erc), 200 mg *(Effective 01/01/2027)*	500 mg *(Discontinue use on 01/01/2027)*	00944-2700-02	1	10
				00944-2700-03	2.5	25
				00944-2700-04	5	50
				00944-2700-05	10	100
				00944-2700-06	20	200
			200 mg *(Effective 01/01/2027)*	00944-2700-07	30	300
HyQvia 10% (with Recombinant Human Hyaluronidase 160 U/mL)	Takeda Pharmaceuticals U.S.A., Inc.	J1575 – Injection, immune globulin/hyaluronidase, (hyqvia), 100 mg immune globulin	100 mg	00944-2510-02	2.5	25
				00944-2511-02	5	50
				00944-2512-02	10	100
				00944-2513-02	20	200
				00944-2514-02	30	300
Cuvitru 20%*	Takeda Pharmaceuticals U.S.A., Inc.	J1555 – Injection, immune globulin (cuvitru), 100 mg	100 mg	00944-2850-01	1	5
				00944-2850-03	2	10
				00944-2850-05	4	20
				00944-2850-07	8	40
				00944-2850-09	10	50
Cutaquig 16.5%*	Octapharma	J1551 – Injection, immune globulin (cutaquig), 100 mg	100 mg	00069-1061-01	1	6
				00069-1802-01	1.65	10
				00069-1476-01	2	12
				00069-1960-01	3.3	20
				00069-1509-01	4	24
				00069-1965-01	8	48

Drug Name	Manufacturer	HCPCS Code	1 Billable unit	NDC	IgG (grams) per vial/syringe	Volume (mL)
Xembify 20%*	Grifols	J1558 – Injection, immune globulin (xembify), 100 mg	100 mg	13533-0810-05	1	5
				13533-0810-10	2	10
				13533-0810-20	4	20
				13533-0810-50	10	50
Immune Globulin, Human, Subcutaneous	N/A	J3590 – Unclassified biologics C9399 – Unclassified drugs or biologicals	N/A	N/A	N/A	N/A

**90284 – immune globulin (SCIg), human, for use in subcutaneous infusions, 100 mg, each*

VII. References

1. Xembify [package insert]. Research Triangle Park, NC; Grifols Therapeutics LLC; July 2024. Accessed June 2026.
2. Cutaquig [package insert]. Vienna, Austria; Octapharma; March 2025. Accessed June2026.
3. Hizentra [package insert]. Bern, Switzerland; CSL Behring AG; April 2023. Accessed June 2026.
4. HyQvia [package insert]. Cambridge, MA; Takeda Pharmaceuticals U.S.A., Inc.; June 2026. Accessed June 2026.
5. Cuvitru [package insert]. Cambridge, MA; Takeda Pharmaceuticals U.S.A., Inc.; February 2025. Accessed June 2026.
6. Gammagard Liquid [package insert]. Cambridge, MA; Takeda Pharmaceuticals U.S.A., Inc.; September 2024. Accessed June 2026.
7. Gamunex-C [package insert]. Research Triangle Park, NC; Grifols Therapeutics LLC; January 2020. Accessed June 2026.
8. Gammaked [package insert]. Research Triangle Park, NC; Grifols Therapeutics LLC; January 2020. Accessed June 2026.
9. Gammagard Liquid ERC [package insert]. Cambridge, MA; Takeda Pharmaceuticals U.S.A., Inc.; June 2025. Accessed June 2026.
10. Jeffrey Modell Foundation Medical Advisory Board, 2013. 10 Warning Signs of Primary Immunodeficiency. Jeffrey Modell Foundation, New York, NY
11. Orange JS, Hossny EM, Weiler CR, et al. Use of intravenous immunoglobulin in human disease: A review of evidence by members of the Primary Immunodeficiency Committee of the American Academy of Allergy, Asthma and Immunology. J Allergy Clin Immunol 2006;117(4 Suppl): S525-53.
12. Orange JS, Ballow M, Stiehm ER, et al. Use and interpretation of diagnostic vaccination in primary immunodeficiency: A working group report of the Basic and Clinical Immunology Interest Section of the American Academy of Allergy, Asthma & Immunology. J Allergy Clin Immunol. 2012 Sep; Vol 130 (3).
13. Bonilla FA, Khan DA, Ballas ZK, et al. Practice Parameter for the diagnosis and management of primary immunodeficiency. J Allergy Clin Immunol 2015 Nov;136(5):1186-205.e1-78.

14. Emerson GG, Herndon CN, Sreih AG. Thrombotic complications after intravenous immunoglobulin therapy in two patients. Pharmacotherapy. 2002;22:1638-1641.
15. Department of Health (London). Clinical Guidelines for Immunoglobulin Use: Update to Second Edition. August, 2011.
16. Provan, Drew, et al. "Clinical guidelines for immunoglobulin use." Department of Health Publication, London (2008).
17. Dantal J. Intravenous Immunoglobulins: In-Depth Review of Excipients and Acute Kidney Injury Risk. Am J Nephrol 2013;38:275-284.
18. Immune Deficiency Foundation. Diagnostic & Clinical Care Guidelines for Primary Immunodeficiency Diseases. 3rd Ed. 2015. Avail at: https://primaryimmune.org/sites/default/files/publications/2015-Diagnostic-and-Clinical-Care-Guidelines-for-PI_1.pdf.
19. 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 Mar;139(3S):S1-S46.
20. Alonso W, Vandeberg P, Lang J, et al. Immune globulin subcutaneous, human 20% solution (Xembify®), a new high concentration immunoglobulin product for subcutaneous administration. Biologicals. 2020;64:34-40.
21. Kobayashi RH, Gupta S, Melamed I, et al. Clinical Efficacy, Safety and Tolerability of a New Subcutaneous Immunoglobulin 16.5% (Octanorm [Cutaquig®]) in the Treatment of Patients with Primary Immunodeficiencies. Front Immunol. February 2019 | Volume 10 | Article 40.
22. van Schaik IN, Bril V, van Geloven N, et al. Subcutaneous immunoglobulin for maintenance treatment in chronic inflammatory demyelinating polyneuropathy (CIDP), a multicenter randomised double-blind placebo-controlled trial: the PATH Study. Lancet Neurol. 2017;17(1):35-46.
23. Hagan JB, Fasano MB, Spector S, et al. Efficacy and safety of a new 20% immunoglobulin preparation for subcutaneous administration, IgPro20, in patients with primary immunodeficiency. J Clin Immunol. 2010;30(5):734-745.
24. Jolles S, Borte M, Nelson Jr RP, et al. Long-term efficacy, safety, and tolerability of Hizentra® for treatment of primary immunodeficiency disease. Clin Immunol. 2014;150(2):161-169.
25. Wasserman RL, Melamed I, Nelson RP Jr, et al. Pharmacokinetics of subcutaneous IgPro20 in patients with primary immunodeficiency. Clin Pharmacokinet. 2011;50(6):405-414.
26. Wasserman RL, Melamed I, Kobrynski L, et al. Efficacy, Safety, and Pharmacokinetics of a 10% Liquid Immune Globulin Preparation (GAMMAGARD LIQUID, 10%) Administered Subcutaneously in Subjects with Primary Immunodeficiency Disease. J Clin Immunol. 2011 Mar 22. [Epub ahead of print]
27. Food and Drug Administration. Safety, efficacy, and pharmacokinetic studies to support marketing of immune globulin intravenous (human) as replacement therapy for primary humoral immunodeficiency. https://www.fda.gov/regulatory-information/search-fda-guidance-documents/safety-efficacy-and-pharmacokinetic-studies-support-marketing-immune-globulin-intravenous-human. Accessed July 2026.
28. Wasserman RL, Melamed I, Stein MR, et al; and IGSC, 10% with rHuPH20 Study Group. Recombinant human hyaluronidase-facilitated subcutaneous infusion of human immunoglobulins for primary immunodeficiency. J Allergy Clin Immunol. 2012;130(4):951-957.
29. Suez D, Stein M, Gupta S, et al. Efficacy, safety, and pharmacokinetics of a novel human immune globulin subcutaneous, 20% in patients with primary immunodeficiency diseases in North America. J Clin Immunol. 2016;36(7):700-712.

30. Roifman CM, Schroeder H, Berger M, et al, and the IGIV-C in PID Study Group. Comparison of the efficacy of IGIV-C, 10% (caprylate/chromatography) and IGIV-SD, 10% as replacement therapy in primary immune deficiency: a randomized double-blind trial. Int Immunopharmacol. 2003;3:1325-1333.
31. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma, Version 2.2026. National Comprehensive Cancer Network, 2026. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed June 2026.
32. Chapel H, Dicato M, Gamm H, et al. Immunoglobulin replacement in patients with chronic lymphocytic leukaemia: a comparison of two dose regimes. Br J Haematol 1994 Sep;88(1):209-12. doi: 10.1111/j.1365-2141.1994.tb05002.x.
33. Grindeland JW, Grindeland CJ, Moen C, Leedahl ND, Leedahl DD. Outcomes Associated With Standardized Ideal Body Weight Dosing of Intravenous Immune Globulin in Hospitalized Patients: A Multicenter Study. Ann Pharmacother. 2020 Mar;54(3):205-212. doi: 10.1177/1060028019880300. Epub 2019 Oct 3.
34. Epland, K., Suez, D. & Paris, K. A clinician's guide for administration of high-concentration and facilitated subcutaneous immunoglobulin replacement therapy in patients with primary immunodeficiency diseases. Allergy Asthma Clin Immunol 18, 87 (2022). https://doi.org/10.1186/s13223-022-00726-7
35. Jeffrey Modell Foundation Medical Advisory Board, 2021. 10 Warning Signs of Primary Immunodeficiency. Jeffrey Modell Foundation, New York, NY. https://res.cloudinary.com/info4pi/image/upload/v1662306262/JMF_10_Signs_Generic_082421_v2_dcadf429cc.pdf?updated_at=2022-09-04T15:44:23.120Z. Accessed July 2025.
36. Van den Bergh PYK, van Doorn PA, Hadden RDM, 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. Eur J Neurol. 2021 Nov;28(11):3556-3583. Erratum in: Eur J Neurol. 2022 Apr;29(4):1288. PMID: 34327760.
37. Bril V, Hadden RDM, Brannagan TH 3rd, et al. Hyaluronidase-facilitated subcutaneous immunoglobulin 10% as maintenance therapy for chronic inflammatory demyelinating polyradiculoneuropathy: The ADVANCE-CIDP 1 randomized controlled trial. J Peripher Nerv Syst. 2023 Sep;28(3):436-449. doi: 10.1111/jns.12573. Epub 2023 Jul 6. PMID: 37314318.
38. Hassan S, Duff K, Wisseh S, et al. Rationale and Design of a Phase 3b Study of the Long-Term Tolerability and Safety of HyQvia in Chronic Inflammatory Demyelinating Polyradiculoneuropathy (CIDP): ADVANCE-CIDP 3 (4331). Neurology 2020-04-14 94(15_supplement): 4331 https://doi.org/10.1212/WNL.94.15_supplement.4331.
39. Referenced with permission from the NCCN Drugs and Biologics Compendium (NCCN Compendium®) Immune globulin: SC. National Comprehensive Cancer Network, 2026. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2026.

40. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Management of CAR T-Cell and Lymphocyte Engager-Related Toxicities, Version 2.2026. National Comprehensive Cancer Network, 2026. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2026.
41. A phase I/II clinical trial of hematopoietic stem cell gene therapy for the Wiskott-Aldrich Syndrome (TIGET-WAS) Clinical Protocol. In: ClinicalTrials.gov [Internet]. Bethesda (MD): National Library of Medicine (US); 2000 [cited 2023 Sep 19]. Identifier NCT01515462. Available from: https://cdn.clinicaltrials.gov/large-docs/62/NCT01515462/Prot_000.pdf.
42. Ferrua F, Cicalese MP, Galimberti S, et al. Lentiviral haemopoietic stem/progenitor cell gene therapy for treatment of Wiskott-Aldrich syndrome: interim results of a non-randomised, open-label, phase 1/2 study. Lancet Haematol. 2019 May;6(5):e239-e253. doi: 10.1016/S2352-3026(19)30021-3. Epub 2019 Apr 10. PMID: 30981783; PMCID: PMC6494976.
43. First Coast Service Options, Inc. Local Coverage Article: Billing and Coding: Immune Globulin (A57778). Centers for Medicare & Medicaid Services, Inc. Updated on 04/24/2026 with effective date 04/01/2026. Accessed June 2026.
44. Novitas Solutions, Inc. Local Coverage Article: Billing and Coding: Immune Globulin (A56786). Centers for Medicare & Medicaid Services, Inc. Updated on 04/24/2026 with effective date 04/01/2026. Accessed June 2026.
45. Wisconsin Physicians Service Insurance Corporation. Local Coverage Article: Billing and Coding: Immune Globulins (A57554). Centers for Medicare & Medicaid Services, Inc. Updated on 04/03/2026 with effective date 04/09/2026. Accessed June 2026.

Appendix A – Non-Quantitative Treatment Limitations (NQTL) Factor Checklist

Non-quantitative treatment limitations (NQTLs) refer to the methods, guidelines, standards of evidence, or other conditions that can restrict how long or to what extent benefits are provided under a health plan. These may include things like utilization review or prior authorization. The utilization management NQTL applies comparably, and not more stringently, to mental health/substance use disorder (MH/SUD) Medical Benefit Prescription Drugs and medical/surgical (M/S) Medical Benefit Prescription Drugs. The table below lists the factors that were considered in designing and applying prior authorization to this drug/drug group, and a summary of the conclusions that Prime's assessment led to for each.

Factor	Conclusion
Indication	Yes: Consider for PA
Safety and efficacy	Yes: Consider for PA
Potential for misuse/abuse	No: PA not a priority
Cost of drug	Yes: Consider for PA

Appendix 1 – Covered Diagnosis Codes (All Products)

ICD-10	ICD-10 Description
C83.00	Small cell B-cell lymphoma, unspecified site
C83.01	Small cell B-cell lymphoma, lymph nodes of head, face, and neck
C83.02	Small cell B-cell lymphoma, intrathoracic lymph nodes
C83.03	Small cell B-cell lymphoma, intra-abdominal lymph nodes
C83.04	Small cell B-cell lymphoma, lymph nodes of axilla and upper limb
C83.05	Small cell B-cell lymphoma, lymph nodes of inguinal region and lower limb
C83.06	Small cell B-cell lymphoma, intrapelvic lymph nodes
C83.07	Small cell B-cell lymphoma, spleen
C83.08	Small cell B-cell lymphoma, lymph nodes of multiple sites
C83.09	Small cell B-cell lymphoma, extranodal and solid organ sites
C91.10	Chronic lymphocytic leukemia of B-cell type not having achieved remission
C91.12	Chronic lymphocytic leukemia of B-cell type in relapse
D80.0	Hereditary hypogammaglobulinemia
D80.1	Nonfamilial hypogammaglobulinemia
D80.2	Selective deficiency of immunoglobulin A [IgA]
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]
D80.7	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
D81.89	Other combined immunodeficiencies
D81.9	Combined immunodeficiency, unspecified
D82.0	Wiskott-Aldrich syndrome
D83.0	Common variable immunodeficiency with predominant abnormalities of B-cell numbers and function
D83.2	Common variable immunodeficiency with autoantibodies to B- or T-cells
D83.8	Other common variable immunodeficiencies
D83.9	Common variable immunodeficiency, unspecified
T80.82X	Complication of immune effector cellular therapy, initial encounter
T80.82X	Complication of immune effector cellular therapy, sequela
T80.89X	Other complications following infusion, transfusion and therapeutic injection, initial encounter

ICD-10	ICD-10 Description
T80.89X	Other complications following infusion, transfusion and therapeutic injection, sequela

Additional covered diagnosis codes applicable to Hizentra and Hyqvia ONLY:

ICD-10	ICD-10 Description
G61.81	Chronic inflammatory demyelinating polyneuritis
G61.89	Other inflammatory polyneuropathies
G62.89	Other specified polyneuropathies

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

The preceding information is intended for non-Medicare coverage determinations. Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determinations (NCDs) and/or Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. Local Coverage Articles (LCAs) may also exist for claims payment purposes or to clarify benefit eligibility under Part B for drugs which may be self-administered. The following link may be used to search for NCD, LCD, or LCA documents: https://www.cms.gov/medicare-coverage-database/search.aspx. Additional indications, including any preceding information, may be applied at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes		
Jurisdiction	**NCD/LCA/LCD Document (s)**	**Contractor**
H, L	A56786	Novitas Solutions, Inc.
N	A57778	First Coast Service Options, Inc.
5, 8	A57554	Wisconsin Physicians Service Insurance Corporation (WPS)

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	**Applicable State/US Territory**	**Contractor**
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	**Applicable State/US Territory**	**Contractor**
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC