

Advancing Quality in IV and SubQ Immunoglobulin Therapy



Referring Patients to Advanced Infusion Care

Advanced Infusion Care (AIC) aims to simplify patient onboarding. Use the documentation checklists and ICD-10 diagnosis codes provided below to submit the necessary patient information.

Referral Information Needed

INFORMATION NEEDED FOR PRIMARY IMMUNE (PI) PATIENTS:

- ✓ Patient demographic sheet
- ✓ Copy of patient's insurance card
- ✓ Prescription (including dose, frequency, and weight)
- ✓ H&P (including supporting documentation of infection history, tried and failed first-line treatments/abx)
- ✓ Serum immunoglobulin panel (including IgA, IgM, IgG, Ig subclasses 1-4)
- ✓ Ig1, Ig2, Ig3, and Ig4 subclass report (if available)
- ✓ Recent BUN and creatinine results
- ✓ Vaccine challenge test results and titer values
- ✓ Vascular Access Device (VAD) report, if applicable

INFORMATION NEEDED FOR NEUROLOGY PATIENTS:

- ✓ Patient demographic sheet
- ✓ Copy of patient's insurance card
- ✓ Prescription (including dose, frequency, and weight)
- ✓ H&P (including supporting documentation of tried and failed first-line treatments/steroids/biologics)
- ✓ Recent BUN and creatinine results
- ✓ Neuro Scale: MGADL, Modified Rankin Scale, etc
- ✓ Lumbar puncture showing CSF protein levels
- ✓ Diagnostic studies: nerve conduction studies/EMG/muscle biopsy/CK levels
- ✓ Vascular Access Device (VAD) report, if applicable

Common ICD-10 codes for PI therapy*:

ICD-10 CODE DESCRIPTION

D80.0[†]	Hereditary hypogammaglobulinemia
D80.1	Nonfamilial hypogammaglobulinemia
D80.2[‡]	Selective deficiency of IgA
D80.3[‡]	Selective deficiency of IgG subclasses
D80.5[‡]	Immunodeficiency with increased IgM
D80.6[‡]	Antibody deficiency with near-normal immunoglobulins
D81.0[†]	SCID with reticular dysgenesis
D81.1[†]	SCID with low T- and B-cell numbers
D81.2[†]	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
D82.9	Immunodeficiency associated with major defect, unspecified
D83.0[†]	CVID with predominant abnormalities of B-cell numbers and function
D83.1[‡]	CVID with predominant immunoregulatory T-cell disorders
D83.2[†]	CVID with autoantibodies to B or T cells
D83.8[†]	Other common variable immunodeficiencies
D83.9[†]	CVID, unspecified

Common ICD-10 codes for neurology therapy*:

ICD-10 CODE DESCRIPTION

D89.89	Other specified disorders involving the immune mechanism, not elsewhere classified
G25.82	Stiff Person Syndrome (SPS)
G35	Multiple sclerosis (RRMS)
G60.9	Hereditary and idiopathic neuropathy, unspecified
G60.0	Hereditary and idiopathic neuropathy, unspecified
G61.0	Guillain-Barré syndrome
G61.81	Chronic inflammatory demyelinating polyneuritis
G61.82	Multifocal motor neuropathy
G61.9	Inflammatory polyneuropathy, unspecified
G70.00	Myasthenia gravis without acute exacerbation
G70.01	Myasthenia gravis with (acute) exacerbation
G70.80	Lambert-Eaton syndrome, unspecified
G72.41	Inclusion body myositis
G72.49	Other inflammatory and immune myopathies
G73.1	Lambert-Eaton syndrome in neoplastic disease
M34.82	Scleroderma
M32.19	Systemic lupus erythematosus
M33.10	Dermatomyositis
M33.20	Polymyositis

*These ICD-10 codes fall under the disease states listed in Jolles S et al. Clinical uses of intravenous immunoglobulin. *Clin Exp Immunol*. 2005;142(1):1-11. doi:10.1111/j.1365-2249.2005.02834.x

[†]These ICD-10 codes reflect diagnoses that are payable for Ig home infusion under Medicare Part B as published in IDF: *SCID Compass*. More PI diagnoses covered for home Ig replacement therapy under Medicare Part B. July 2019. <https://primaryimmune.org/scid-compass/news/more-pi-diagnoses-covered-home-ig-replacement-therapy-under-medicare-part-b>

[‡]These ICD-10 codes were added per CMS guidelines, effective August 2019, as published in IDF: *SCID Compass*. See reference directly above.

Discover Our Selection of Immunoglobulin Products

Learn more about the IV and SubQ immunoglobulin therapy products that we offer. Want selection or dosing guidance? Our clinical pharmacists are ready to help you pick the products that meet the health conditions and restrictions of your patients.

	ASCENIV™	BIVIGAM®	GAMMAPLEX®		HIZENTRA®	PRIVIGEN®	ALYGLO™	GAMUNEX™-C		XEMBIFY®	GAMMAKED™	YIMMUGO®	CUTAQUIG®	OCTAGAM®		PANZYGA®	CUVITRU™	GAMMAGARD LIQUID®		GAMMAGARD® S/D	HYQVIA®	
Manufacturer	ADMA Biologics Inc.		Bio Products Laboratory		CSL Behring		Green Cross	Grifols			Kedrion			Octapharma		Pfizer	Takeda					
Indications	PI	PI	PI, ITP		PI, CIDP	PI, ITP, CIDP (limited use)	PI	IV: PI, ITP, CIDP	SubQ: PI	PI	IV: PI, ITP, CIDP	SubQ: PI	PI	PI	5%: PI	10%: ITP	PI, ITP, CIDP	PI (patients >2 yrs of age)	IV: PI, MMN, CIDP	SubQ: PI	PI, ITP, B-cell CLL, Kawasaki disease	PI, CIDP
Form	Liquid	Liquid	Liquid		Liquid	Liquid	Liquid	Liquid		Liquid	Liquid		Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Lyophilized	Liquid
Shelf life and storage requirements	Refrigerate at 2°C-8°C (36°F-46°F). Do not freeze or heat. Do not use after expiration date	Stored until expiration date on vial packaging at 2°C-8°C (36°F-46°F)	36 months (room temperature storage)		30 months (room temperature storage)	36 months (room temperature storage)	Refrigeration: 2°C to 8°C (36°F-46°F) for 36 months Room temperature: (>8°C and up to 25°C/>46°F and up to 77°F) for 24 months	36 months		36 months (refrigerated at 36°F-46°F) 6 months (room temperature storage not exceeding 77°F)	36 months		Preferred at refrigeration 2°C to 8°C (36°F-46°F). May be stored for a period of no longer than 6 months within the original expiration date at room temperature (>8°C and up to 25°C/>46°F and up to 77°F). Once stored at room temperature, do not return to refrigeration	24 months (refrigerated) 6 months (room temperature storage not exceeding 77°F)	24 months		24 months (refrigerated up to 46°F) 9 months (room temperature storage not exceeding 77°F)	12 months room temperature (do not exceed 25°C/77°F)	36 months (refrigerated) 24 months (room temperature storage not exceeding 77°F)		24 months (room temperature storage)	36 months (refrigerated at 36°F-46°F) 3 months (room temperature storage not exceeding 77°F)
Reconstitution time	None (liquid solution)	None (liquid solution)	None (liquid solution)		None (liquid solution)	None (liquid solution)	None (liquid solution)	None (liquid solution)		None (liquid solution)	None (liquid solution)		None (liquid solution)	None (liquid solution)	None (liquid solution)		None (liquid solution)	None (liquid formulation)	None (liquid solution)		n/a	None (liquid solution)
Available concentration	10%	10%	5%	10%	20%	10%	10%	10%		20%	10%		10%	16.5%	5%	10%	10%	20%	10%		5%	10%
Maximum recommended infusion rate	Up to 0.08 mL/kg/min	Up to 6 mL/kg/min	4.8 mL/kg per hr		Up to 25 mL/hr per site (50 mL/hr for all sites combined)	4.8 mL/kg per hr	0.8 mL/kg/min	4.8 mL/kg per hr	20 mL/per hr	25 mL/hr per site	4.8 mL/kg per hr	20 mL/per hr	First infusion: max rate= 0.03 mL/kg/min Subsequent infusions (as tolerated): max rate=0.13 mL/kg/min	Up to 100 mL/hr at all sites combined	≤4.2 mL/kg per hr	0.01 mL/kg per min		First 2 infusions: 10-20 mL/hr/site All subsequent infusions: up to 60 mL/hr/site	5 mL/kg per hr	≥40 kg BW: 30 mL/site at 20-30 mL/hr per site ≤40 kg BW: 20 mL/site at 15-20 mL/hr per site	4 mL/kg per hr	<40 kg: ≤300 mL per injection site ≥40 kg: ≤600 mL per injection site
Time to infuse 35 g	Varies based on volume and tolerability	Varies based on volume and tolerability	2 hrs, 40 mins for a 70-kg person, if infused according to PI	1 hr, 53 mins for a 70-kg person, if infused according to PI	Varies based on volume and tolerability	Varies based on patient tolerability	Varies based on volume and tolerability	Varies based on administration method		Varies based on volume and tolerability	Varies based on administration method		Varies based on patient tolerability	2 hrs, 30 mins	Varies based on patient tolerability		Varies based on patient tolerability	Varies based on patient tolerability		Varies based on patient tolerability	Varies based on patient tolerability	
Sugar content	Contains no sucrose	Contains no sucrose/ glucose/maltose	5% D-sorbitol (polyol)	None	None	None	None	None		None	None		79 mg/mL (maltose)	10 mg/mL (maltose)	None		No added sugars	No added sugars		20 mg/mL (glucose)	No added sugars	
Sodium content	0.100-0.140 M (sodium chloride)	0.100-0.140 M (sodium chloride)	30-50 mmol/L	<30 mM	Trace amounts (≤10 mmol/L)	Trace amounts	None	Trace amounts		Trace amounts	Trace amounts		≤30 mmol/L	≤30 mmol/L	Trace amounts		No added sodium	No added sodium		8.5 mg/mL (sodium chloride)	8.5 mg/mL in HYQVIA (none in immunoglobulin)	
Osmolarity/osmolality	240-310 mOsm/kg	454-472 mOsm/kg	460-500 mOsm/kg	~280 mOsm/kg	380 mOsm/kg	Isotonic (380 mOsm/kg)	298 mOsm/kg	258 mOsm/kg		280-404 mOsm/kg	258 mOsm/kg		280 to 380 mOsm/kg	310-380 mOsm/kg	310-380 mOsm/kg		240-310 mOsm/kg	280-292 mOsm/kg		240-300 mOsm/kg	636 mOsm/kg	240-300 mOsm/kg
pH	4.0-4.6	4.0-4.6	4.6-5.1	4.9-5.2	4.6-5.2	4.8	4.5-5.5	4.0-4.5		4.1-4.8	4.0-4.5		4.4-5.2	5.0-5.5	5.1-6.0		4.5-5.0	4.6-5.1		4.6-5.1	6.8 ± 0.4	4.6-5.1
IgA content	≤200 µg/mL	Contains trace amounts of IgA	<4 mcg/mL (average)	<20 mcg/mL (specification value)	≤50 mcg/mL	≤25 mcg/mL	≤100 mcg/mL	46 µg/mL		IgA <0.07 mg/mL	46 µg/mL		<300 mcg/mL	≤0.6 mg/mL	100 µg/mL		100 µg/mL (average)	80 µg/mL		37 µg/mL	<1 µg/mL	37 µg/mL
Approved method of administration	IV	IV	IV		SubQ	IV	IV	SubQ	SubQ	IV	SubQ	IV	SubQ	IV	IV		SubQ	IV	SubQ	IV	SubQ	



Partner With AIC for Your Patients' Infusion Therapy Needs

At AIC, we're committed to being your trusted partner in patient care. To get your patients started on infusion therapy:

1. Complete our referral form, available on our website, for both IV and SubQ therapies.
2. If applicable, please include the patient's VAD report.
3. Once the referral is reviewed by our clinical specialists, an AIC representative will promptly reach out to guide you through the next steps.

Visit <https://aiscargroup.com/our-divisions/infusion-care/> to begin the referral process today.



IgNS CORPORATE
MEMBER
Advancing Ig Therapy Practice Together