Immune Globulin (Human) Reference Chart

Place an Order (800) 843-7477 Emergency Orders 24/7/365

Online Ordering FFFenterprises.com biosupply.fffenterprises.com

FFF enterprises Helping Healthcare Care®

Product Name	IVIG	Flebogamma® 10% DIF	IVIG	GAMMAGARD® S/D IgA < 1 µg/mL	IVIG	GAMMAPLEX® 5%	GAMMAPLEX® 10%
Manufacturer/ Supplier		Grifols		Takeda		Bio Products Laboratory	
Contact Number		(888) 474-3657		(800) 423-2862		(866) 398-0825	
Sizes		5 g, 10 g, 20 g		5 g, 10 g		5 g, 10 g, 20 g	
Storage		2° to 25°C (36° to 77°F). Do not freeze.		Not to exceed 25°C (77°F). Do not freeze. Do not shake.		2° to 25°C (35.6° to 77°F). Do not freeze. Do not shake.	
Form		Liquid		Lyophilized		Liquid	
Reconstitution Fluid		N/A		Sterile Water for Injection		N/A	
Concentration Options		10%		5% or 10%	5%		10%
Filtration		Not required		Product supplied with a transfer device and administration set that includes an integral airway and a 15 micron filter.		Not required	
Indications		PI, chronic ITP (age ≥ 2 years)		PI (age ≥ 2 years), chronic ITP (adults), B cell CLL, pediatric Kawasaki disease		PI (age ≥ 2), chronic ITP	PI (age ≥ 2), chronic ITP (adults)
Contraindications		History of anaphylactic or severe systemic hypersensitivity reactions to human immune globulin, IgA-deficient patients with antibodies to IgA and a history of hypersensitivity.		History of anaphylactic or severe systemic hypersensitivity reactions to the administration of GAMMAGARD S/D with < 1 µg/mL IgA in ≥ 5% solution.		History of anaphylactic or severe systemic reaction to the administration of human immunoglobulin, IgA deficiency with antibodies to IgA and a history of hypersensitivity. 5% concentration only. Hereditary intolerance to fructose, also in infants and neonates for whom sucrose or fructose tolerance has not been established.	
Initial Infusion Rate[1]		0.01 mL/kg/min		The recommended initial 5% solution infusion rate is 0.5 mL/kg/hr. Patients who tolerate the 5% concentration at 4 mL/kg/hr can be infused with 10% concentration starting at 0.5 mL/kg/hr.		0.01 mL/kg/min (0.5 mg/kg/min)	0.005 mL/kg/min (0.5 mg/kg/min)
Other Administration Information[2]		Several vials may be pooled into an empty sterile IV solution container by using aseptic technique.		Begin administration as soon as possible within 2 hours if reconstitution is performed aseptically outside of a sterile laminar air flow hood.[3] Administer the reconstituted material at room temperature.		Administer at room temperature. Infuse using a separate infusion line. An infusion pump may be used to control the rate of administration. For administration of large doses, pool multiple vials using aseptic technique. 5% concentration only: Begin infusion within 2 hours after pooling.	
Compatibility Issues[4]		Do not dilute with other IV fluids. Do no inject other medications into IV tubing being used for Flebogamma, or add any medications or other IV fluids to the Flebogamma infusion container. Infuse through a separate IV line.		Administer separately from other drugs/medications. Do not mix the product with human IVIG products from other manufacturers.		Do not mix with other IV medications (including normal saline) or IVIG products.	
IgA Content		< 100 µg/mL		< 1 µg/mL (5% concentration)		< 10 µg/mL	< 20 µg/mL
Sugar Content		**D-sorbitol 50 mg/mL**		**Glucose 20mg/ml (5% concentration)**, glycine		**D-sorbitol 50 mg/mL**, glycine, polysorbate 80	Glycine, polysorbate 80
Osmolality		240–370 mOsm/L		5% concentration: 636 mOsm/L 10% concentration: 1250 mOsm/L		Not less than 240 mOsmol/kg (typically 420 to 500 mOsmol/kg)	Not less than 240 mOsmol/kg (typically 280 mOsmol/kg)

Product Name	IVIG	Octagam® 5%	Octagam® 10%	IVIG	PANZYGA®	IVIG	Privigen®	IVIG SCIG	GAMMAGARD LIQUID®	IVIG SCIG	GAMMAKED™	IVIG SCIG	GAMUNEX-C®
Manufacturer/ Supplier		Octapharma			Octapharma, distributed by Pfizer		CSL Behring		Takeda		Kedrion Biopharma		Grifols
Contact Number		(888) 429-4535			(888) 429-4535		(800) 504-5434		(800) 423-2862		(855) 353-7466		(888) 474-3657
Sizes		1 g, 2.5 g, 5 g, 10 g	2 g, 5 g, 10 g, 20 g		2.5 g, 5 g, 10 g, 20 g, 30 g		5 g, 10 g, 20 g, 40 g		1 g, 2.5 g, 5 g, 10 g, 20 g, 30 g		5 g, 10 g, 20 g		1 g, 2.5 g, 5 g, 10 g, 20 g, 40 g
Storage		2°to 25°C (36°to 77°F). Do not freeze.	2°to 8°C (36°F to 46°F). Within first 6 months, may be stored at 25°C (≤ 77°F).		2° to 8°C (36° to 46°F) for up to 24 months. Up to 25°C (77°F) for up to 9 months. After storage at 25°C (77°F), either use immediately or discard the product. Do not freeze.		Room temperature up to 25°C (77°F) to expiration date on label.[5] Do not freeze. Do not shake. Keep in original carton to protect from light.		2° to 8°C (36° to 46°F) for up to 36 months. Up to 25°C (77°F) for up to 24 months.[6] Do not freeze. Do not shake.		2° to 8°C (36° to 46°F) AND at temperatures not to exceed 25°C (77°F) for up to 6 months.[7] Do not freeze. Do not shake.		2° to 8°C (36° to 46°F) AND at temperatures not to exceed 25°C (77°F) for up to 6 months.[7] Do not freeze. Do not shake.
Form		Liquid			Liquid		Liquid		Liquid		Liquid		Liquid
Reconstitution Fluid		N/A			N/A		N/A		N/A		N/A		N/A
Concentration Options		5%	10%		10%		10%		10%		10%		10%
Filtration		If a filtered infusion set is used (not mandatory), the filter size must be 0.2 to 200 microns.			Not required		Not required		In-line filter optional		Not required		Not required
Indications		PI	chronic ITP (adults)		PI (age ≥ 2), chronic ITP (adults)		PI, chronic ITP (age ≥15 years), CIDP (adults)	IVIG: PI (age ≥2 years), MMN (adults)	SCIG: PI (age ≥2 years)	IVIG: PI (age ≥2 years), CIDP (adults), ITP	SCIG: PI (age ≥2 years)	IVIG: PI (age ≥2 years), CIDP (adults), ITP	SCIG: (age ≥2 years)
Contraindications		History of acute severe hypersensitivity reactions to human immunoglobulin. IgA-deficient patients with antibodies against IgA and a history of hypersensitivity. Octagam 5%: History of acute hypersensitivity reactions to corn, including corn allergy (Octagam 10%: Warning/Precaution for patients with corn allergy).			History of anaphylactic or severe systemic reactions to human immune globulin. IgA-deficient patients with antibodies against IgA and a history of hypersensitivity.		Hypersensitivity to human immunoglobulin. Hyperprolinemia (Privigen contains L-proline as a stabilizer.) IgA-deficient patients with antibodies to IgA and a history of hypersensitivity.		History of anaphylactic or severe systemic reactions to human immunoglobulin. IgA-deficient patients with antibodies to IgA and a history of hypersensitivity.		IgA deficiency with antibodies to IgA and a history of hypersensitivity. Anaphylactic or severe systemic reactions to human immunoglobulin.		IgA deficiency with antibodies to IgA and a history of hypersensitivity. Anaphylactic or severe systemic reactions to human immunoglobulin.
Initial Infusion Rate[1]		0.5 mg/kg/min	1 mg/kg/min		0.01 mL/kg/min (1 mg/kg/min)		0.005 mL/kg/min (0.5 mg/kg/min)	IVIG: 0.5 mL/kg/hr (0.8 mg/kg/min)	SCIG: If ≥ 40 kg body weight: 30 mL/site at 20 mL/hr/site. If < 40 kg body weight: 20 mL/site at 15 mL/hr/site.	IVIG: 1 mg/kg/min for PI/ITP and 2 mg/kg/min for CIDP.	SCIG (for PI only): 20 mL/hr per infusion site (adults); see prescribing information for children.	IVIG: 1 mg/kg/min for PI/ITP and 2 mg/kg/min for CIDP.	SCIG (for PI only): 20 mL/hr per infusion site (adults); see prescribing information for children and adolescents.
Other Administration Information[2]		Administer at room temperature.			Administer at room or body temperature only, using an in-line filter with pore size 0.2-200 microns (although filtering not mandatory.) After administration, flush the infusion line with either normal saline or 5% dextrose in water.		Infuse at room temperature. Do not shake. Vials may be pooled using aseptic technique (begin infusion within 8 hours of pooling.) Contains no preservative; use promptly once vial is entered.		Do not mix with other products. Do not shake. Allow product to come to room temperature before use. Do not microwave.		If dilution is required, may be diluted with 5% dextrose in water (D5W). Contents of vials may be pooled under aseptic conditions into sterile infusion bags. Use within 8 hours after pooling. Warm to room temperature prior to infusion.		If dilution is required, may be diluted with 5% dextrose in water (D5W). Contents of vials may be pooled under aseptic conditions into sterile infusion bags. Use within 8 hours after pooling. Warm to room temperature prior to infusion.
Compatibility Issues[4]		Administer separately from other drugs or medications. The infusion line may be flushed before or after Octagam administration with either normal saline or 5% dextrose in water (D5W).			Do not administer PANZYGA simultaneously with another intravenous preparation in the same infusion set, including immune globulin products from another manufacturer.		Do not mix with other IVIG products or other intravenous medications. May be diluted with Dextrose Injection, USP (D5W). Infusion line can be flushed with D5W or 0.9% Sodium Chloride for Injection, USP		If dilution is desired, 5% dextrose in water (D5W) may be used as a diluent. Do not use normal saline as a diluent (the infusion line may be flushed with normal saline).		Infuse product by separate line without mixing with other IV fluids or medications. **Do not dilute with saline.**		Infuse product by separate line without mixing with other IV fluids or medications. **Do not dilute with saline.**
IgA Content		Not more than 200 µg/mL	Average of 106 µg/mL		Average 100 µg/mL		≤ 25 µg/mL		Average 37 µg/mL		Average 46 µg/mL		Average 46 µg/mL
Sugar Content		**Maltose 100 mg/mL**[9]	**Maltose 90 mg/mL**[9]		Glycine		L-proline		Glycine		Glycine		Glycine
Osmolality		310-380 mOsmol/kg			240-310 mOsmol/kg		320 mOsmol/kg (range 240 to 440 mOsmol/kg)		240–300 mOsmol/kg		258 mOsmol/kg		258 mOsmol/kg

Product Name	SCIG	CUTAQUIG®	SCIG	CUVITRU®[17]	SCIG	Hizentra®	SCIG	HYQVIA®	IVIG	GamaSTAN® S/D
Manufacturer/ Supplier		Octapharma		Takeda		CSL Behring		Takeda		Grifols
Contact Number		(888) 429-4535		(800) 423-2862		(800) 504-5434		(800) 423-2862		(888) 474-3657
Sizes		1 g (6 mL), 1.65 g (10 mL), 2 g (12 mL), 3.3 g (20 mL), 4 g (24 mL), 8 g (48 mL)		1 g (5 mL), 2 g (10 mL), 4 g (20 mL), 8 g (40 mL)		1 g (5 mL), 2 g (10 mL), 4 g (20 mL), 10 g (50 mL)		2.5 g (25 mL), 5 g (50 mL), 10 g (100 mL), 20 g (200 mL), 30 g (300 mL)[15]		2 mL, 10 mL
Storage		2° to 8°C (36°F to 46°F) for up to 24 months. Up to 25°C (77°F) for up to 6 months without return to refrigeration. After storage at 25°C (77°F), discard if not used. Do not freeze. Do not shake solution.		2°C to 8°C (36°F to 46°F) for up to 36 months, or room temperature (not to exceed 25°C [77°F]) for up to 12 months. Do not freeze. Do not shake.		Room temperature up to 25°C (77°F). Do not freeze. Do not shake.		2°C to 8°C (36°F to 46°F). Within first 3 months, may be stored at up to 25°C (77°F) during first 24 months from date of manufacturing. Do not freeze. Do not shake.		2° to 8°C (36° to 46°F). Do not freeze.
Form		Liquid		Liquid		Liquid		Liquid		Liquid
Reconstitution Fluid		N/A		N/A		N/A		N/A		N/A
Concentration Options		16.5%		20%		20%		10% IG with Recombinant Human Hyaluronidase (PH20)		15%–18% protein solution
Filtration		Not required		Not required		Not required		Not required		Not required
Indications		PI in adults		PI (age ≥ 2 years)		PI (age ≥ 2 years), CIDP (adults)		PI (adults)		Hepatitis A, measles (rubeola), varicella, rubella[13]
Contraindications		History of anaphylactic or severe systemic reaction to SC administration of human IG or to any components of CUTAQUIG (e.g. Polysorbate 80). IgA deficient patients with antibodies against IgA and a history of hypersensitivity to IG treatment.		History of an anaphylactic or severe systemic hypersensitivity reaction to the subcutaneous administration of human immune globulin. IgA-deficient patients with antibodies to IgA and a history of hypersensitivity to human immune globulin treatment.		History of anaphylactic or severe systemic reactions to human immune globulin or to components of Hizentra, such as polysorbate 80. Hyperprolinemia (type I or II); Hizentra contains L-proline as a stabilizer. IgA-deficient patients with antibodies against IgA and a history of hypersensitivity.		History of anaphylactic or severe systemic reactions to the administration of IgG. IgA-deficient patients with antibodies to IgA and a history of hypersensitivity. Known hypersensitivity to hyaluronidase including PH20 of HYQVIA. Known systemic hypersensitivity to human albumin (in the PH20 solution).		Persons with isolated IgA deficiency. Severe thrombocytopenia or any coagulation disorder or where IM injections are contraindicated.[14]
Initial Infusion Rate[1]		**For subcutaneous use only.** Refer to full prescribing information (Section 2.3 Administration) for initial administration rate instructions.		**For subcutaneous administration only.** Refer to full prescribing information (Section 2.3. Administration) for initial infusion rate instructions.		**For subcutaneous infusion only. Do not inject into a blood vessel (vein or artery).** For first infusion, do not exceed maximum volume of 15 mL per infusion site (PI) or 20 mL per infusion site (CIDP).		**For subcutaneous use only.** Administer PH20 at an initial rate per site of approximately 1 to 2 mL per minute, or as tolerated. Refer to full prescribing information (Section 2.2: Administration) for 10% immune globulin initial infusion rate instructions.		See full prescribing information for dosing information.
Other Administration Information[2]		Administer using an infusion pump and compatible syringe(s). Do not dilute CUTAQUIG.		Allow refrigerated vials to come to room temperature. Do not dilute. Do not shake. Do not apply heat or place in microwave. Do not return CUVITRU to the refrigerator if taken out to room temperature.		Discard all used administration supplies and any unused product immediately after each infusion.		Allow refrigerated product to come to room temperature before use. Use infusion pump capable of infusing at rates up to 300 mL/hr/site. Use a 24 gauge SC needle set labeled for high flow rates. Consider using longer needles (14 or 12 mm rather than 9 mm) and/or >1 infusion site.		Do not administer subcutaneously or intravenously due to potential for serious reactions. Administer intramuscularly, preferably in the anterolateral aspects of the upper thigh and the deltoid muscle of the upper arm. The gluteal region should not be used routinely.
Compatibility Issues[4]		Do not mix CUTAQUIG solution with other products.		Do not mix CUVITRU with other products.		Do not mix Hizentra with other products.		Do not mix the PH20 and 10% immune globulin into the same container prior to administration. Do not mix or administer components of HYQVIA with other products. Flush the infusion line with normal saline or Dextrose 5% in water (D5W) if required.		N/A
IgA Content		≤0.6 mg/mL		Average 80 µg/mL		≤50 mcg/mL		Average 37 µg/mL		Not identified in prescribing information
Sugar Content		**Maltose 79 mg/mL**[9]		Glycine		L-proline, polysorbate 80		Glycine		None
Osmolality		310-380 mOsmol/kg		280 to 292 mOsmol/kg		N/A		240 to 300 mOsmol/kg		N/A

GENERAL INFORMATION

Do not mix immune globulin intravenous (human) products of differing formulations or brands. Do not use reconstituted products if particulate matter or discoloration is seen. Antibodies may interfere with response to live viral vaccines.

The information presented in this guide is not meant to serve as a guideline for patient management. Any procedures, medications or other courses of diagnosis or treatment discussed or suggested in this guide should not be used by clinicians without full evaluation of their patients' conditions and possible contraindications or dangers in use, review of any applicable manufacturer's product information, and comparison with recommendations of other authorities.

KEY

CLL	chronic lymphocytic leukemia
CIDP	chronic inflammatory demyelinating polyneuropathy
IgA	immunoglobulin A
IGIM	immune globulin intramuscular
ITP	immune thrombocytopenic purpura
IVIG	intravenous immune globulin
mL	milliliter
MMN	multifocal motor neuropathy
mOsm/kg	milliosmoles per kilogram
mOsm/L	milliosmoles per liter
N/A	not applicable
PH20	recombinant human hyaluronidase
PI	primary immunodeficiency disorders
SCIG	subcutaneous immune globulin
µg	micrograms

NOTES

[1] Additional instructions or special recommendations (e.g., administration to patients at increased risk of acute renal failure) may appear in full prescribing information; always refer to full prescribing information before initiating treatment with any of these products.

[2] Includes selected highlights only; for complete administration instructions, refer to full prescribing information.

[3] Call for availability.

[4] Total storage time depends on timing of transfer to room temperature; see full prescribing information.

[5] Manufacture of GAMMAGARD S/D with IgA < 2.2 µg/mL was discontinued after December 2012; manufacture of GAMMAGARD S/D with IgA < 1 µg/mL will continue. See full prescribing information for contraindications to GAMMAGARD S/D with IgA < 2.2 µg/mL.

[6] When reconstitution is performed aseptically in a sterile laminar air flow hood, the reconstituted product may be either maintained in the original glass container or pooled into Viaflex bags and stored under constant refrigeration (2°–8°C). Check with each manufacturer on extended stability information.

[7] FFF does not currently supply this product.

[8] May store at temperatures not to exceed 25°C (77°F) for up to 6 months anytime during the 36 month shelf life.

[9] Maltose can be misinterpreted as glucose (resulting in falsely elevated glucose readings) by certain types of blood glucose testing systems. See manufacturer's warning.

[10] When stored up to 25°C (77°F), product is stable for up to 36 months as indicated by the expiration date on the packaging.

[11] Doses may be divided and infused into several sites (refer to full prescribing information for maximum number of sites to use at the same time). Injection sites in the same session should be at least two inches apart. Change the actual site of injection with each weekly administration.

[12] Packaged with 1.25 mL, 2.5 mL, 5.0 mL, 10.0 mL and 15.0 mL of recombinant human hyaluronidase (PH20), respectively.

[13] Should not be used for prophylaxis of viral hepatitis type B. Not indicated for routine prophylaxis or treatment of rubella, poliomyelitis, mumps or varicella. Not indicated for allergy or asthma in patients who have normal levels of immunoglobulin. Refer to full prescribing information.

[14] Should be given with caution to patients with a history of prior systemic allergic reactions following administration of human immunoglobulin preparations.

IG Resources

IG Reimbursement Calculator

Calculate your current Medicare intravenous immune globulin (IVIG) and subcutaneous immune globulin (SCIG) rates at **FFFenterprises.com**.

IG Living Magazine

Resources for successful living for immune globulin patients and their healthcare providers. Subscribe and view our online edition at **IGLiving.com**.

Reimbursement Question?

FFF has a robust, nationwide sales force of professionals, as well as access to infusion, pharmacy and reimbursement advisors. Our skilled professionals are experienced with every IG product we carry and can provide answers to your questions 24/7 at **(800) 843-7477**.

IVIG & SCIG Dosing Calculations

LIQUID PRODUCTS

The ready-to-infuse liquid form is manufactured in 5%, 10%, 16.5% and 20% concentrations and requires no reconstitution or dilution. Gram-volume relationships are as follows. Not all IVIG brands are available in all sizes. See chart on other side.

IVIG Liquid 10% (and some SCIG brands)							
1 g	2 g	2.5 g	5 g	10 g	20 g	30 g	40 g
10 mL	20 mL	25 mL	50 mL	100 mL	200 mL	300 mL	400 mL

IVIG Liquid 5%					
1 g	2.5 g	5 g	10 g	20 g	25 g
20 mL	50 mL	100 mL	200 mL	400 mL	500 mL

CUTAQUIG® 16.5%					
1 g	1.65 g	2 g	3.3 g	4 g	8 g
6 mL	10 mL	12 mL	20 mL	24 mL	48 mL

CUVITRU® 20%			
1 g	2 g	4 g	8 g
5 mL	10 mL	20 mL	40 mL

Hizentra® 20%			
1 g	2 g	4 g	10 g
5 mL	10 mL	20 mL	50 mL

HYQVIA® (10% Immune Globulin with recombinant human hyaluronidase)					
IG	2.5 g	5 g	10 g	20 g	30 g
	25 mL	50 mL	100 mL	200 mL	300 mL
Hyaluronidase	200 u	400 u	800 u	1600 u	2400 u
	1.25 mL	2.5 mL	5 mL	10 mL	15 mL

LYOPHILIZED PRODUCTS

The only lyophilized product, Gammagard S/D Low IGA, must be reconstituted prior to administration. The patient's fluid and renal function should be considered in selecting an appropriate concentration. The proper amount of sterile water for injection (SWFI) is necessary to produce the correct concentration. SWFI volumes and osmolarity/osmolality appear in the chart below.

GAMMAGARD® S/D LOW IGA Packaged with sterile water for injection; final volumes in parentheses.			
Concentration	5 g	10 g	Osmolarity (mOsm/L)*
5%	96 mL (100 mL)	192 mL (200 mL)	636
10%	48 mL (50 mL)	96 mL (100 mL)	1250

HIZENTRA DOSAGE RECOMMENDATION FOR CIDP

- Initiate HIZENTRA 1 week after the last IVIG dose.
- Recommended HIZENTRA dose is 0.2 g/kg (1 mL/kg) per week (all dosing based on actual body weight).
  - In the clinical study after transitioning from IVIG to HIZENTRA, a dose of 0.4 g/kg (2 mL/kg) per week was also safe and effective to prevent CIDP relapse.
- If CIDP symptoms worsen, consider re-initiating treatment with IVIG, while discontinuing HIZENTRA.
  - If improvement and stabilization are observed during IVIG treatment, consider reinitiating HIZENTRA at 0.4 g/kg per week, while discontinuing IVIG.
  - If CIDP symptoms worsen on 0.4 g/kg per week, consider re-initiating therapy with IVIG, while discontinuing HIZENTRA.
- Monitor and adjust based on clinical response.

Service Directory Wow! Customer Care Ordering

Place an Order

(800) 843-7477

Emergency Orders 24/7/365

Online Ordering

FFFenterprises.com

biosupply.fffenterprises.com

BioSupply®
Online Ordering System
biosupply.fffenterprises.com

MyFluVaccine™
Flu Vaccine Program
MyFluVaccine.com

MiniBarRx®
Vaccines & Biologics Inventory Management Solution
(855) 544-2122
www.minibarrx.com

Verified Inventory Program-Consignment (VIPc)®
Inventory Management
(800) 843-7477

Wow! Customer Care
Questions & Orders
(800) 843-7477

BuyByeRx™
Discounted Pharmaceuticals Marketplace
BuyByeRx.com

IG Living Magazine
Immune Globulin Community
IGLiving.com

BioSupply Trends Quarterly Magazine
BSTQuarterly.com

FAX (800) 418-4333 **EMAIL** customerservice@fffenterprises.com

REGULAR ORDERING HOURS

8 AM - 8 PM ET | 7 am - 7 pm CT | 6 am - 6 pm MT | 5 am - 5 pm PT

SHIPPING

FOB Origin - Standard: Overnight or 2 day delivery

FOB Destination - Expedited: Same day

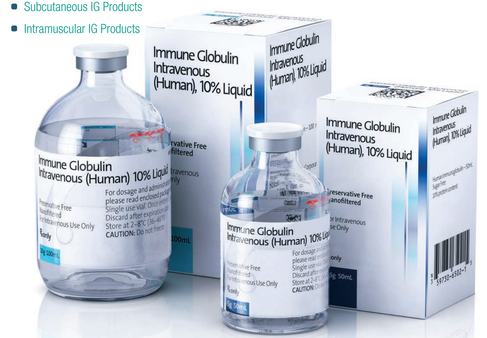
FFF Enterprises is the nation's most trusted specialty distributor of plasma products, vaccines, biosimilars and other specialty pharmaceuticals. Our partners include all manufacturers of influenza vaccines, and we serve over 80 percent of U.S. hospitals and supply the nation's leading non-acute GPO members.

FFF Enterprises is dedicated to improving and safeguarding the supply of specialty pharmaceuticals through Guaranteed Channel Integrity™ — our commitment to purchase product directly from the manufacturer and ship it only to a licensed healthcare professional.

From our in-house teams of customer care representatives, advisors and advocates, to our national field team of territory managers, there is always a responsive, dedicated expert to take care of your questions 24/7 at (800) 843-7477.

Immune Globulin (Human) Reference Chart

- Intravenous IG Products
- Subcutaneous IG Products
- Intramuscular IG Products



FFF enterprises
Helping Healthcare Care®

The nation's largest and most trusted specialty distributor of plasma products, vaccines, biosimilars and other specialty pharmaceuticals and biopharmaceuticals.

Patient Safety | Product Efficacy | Fair Pricing

The critical-care products you need, when you need them.

Guaranteed Channel Integrity

Beginning in 1988, FFF had the goal to provide our customers and patients with counterfeit-free products. We have maintained this goal through our commitment to **Guaranteed Channel Integrity®**—our promise to purchase only from manufacturers and ship only to licensed healthcare providers, thereby protecting you and your patients from the risks of counterfeiting, drug diversion and irresponsible pricing.

Lot-Track™

Our **Lot-Track®** service tracks products by lot number and provides recall notifications within four hours directly to those affected.

FFF enterprises VERIFIED INVENTORY PROGRAM

Our **Verified Inventory Program-Consignment (VIPc)®** utilizes RFID-powered technology to provide real-time inventory management of high-value medications and eliminate carrying costs through a consignment-based model, allowing you to focus on patient care.

With a perfect safety track record of counterfeit-free product distribution since 1988, FFF continues to set the standard for patient safety, product efficacy, and fair pricing for the critical-care products and vaccines that improve the quality of life for the patients we serve.

- Immune Globulins
- Hyperimmune Globulins
- Coagulation
- Antithrombin
- Albumin
- Antivirals
- Influenza Vaccines
- Pediatric Vaccines
- Adult Vaccines
- Brand Pharmaceuticals
- Other Pharmaceuticals
- Oncology
- Ophthalmology
- Ancillaries
- BioSurgicals