**BRAND NAME** | Gammagard S/D | Gammagard Liquid | HYVOIA® | Gammareplex | Bivigam | Carimune NF | Hizentra | Privigen | Flebogamma DIF | Gamunex - C | Gammaked | Octagam  
|----------------|----------------|----------------|--------|------------|--------|----------|--------|--------|----------------|-----------|--------|--------|  
| **MANUFACTURER** | Baxalta Incorporated | Baxalta Incorporated | Baxalta Incorporated | Biost Products Laboratory | CSL Behring | CSL Behring | CSL Behring | Grifols | Grifols | Kedrion | Octapharma  
| **METHOD OF PRODUCTION (Including Viral Inactivation)** | Cohr-Oncley fractionation, ion-exchange chromatography, solvent/detergent treatment | Cohr-Oncley fractionation, ion-exchange chromatography, solvent/detergent treatment | | | | | | | | | |  
| **FORM** | Lyophilized | Liquid | Liquid | Lyophilized | Liquid | Liquid | Liquid | Liquid | Liquid | Liquid | Liquid |  
| **SHELF-LIFE STORAGE REQUIREMENT** | 24 Months (room temperature storage) | 36 Months (refrigerated) 24 Months (room temperature storage not to exceed 25°C or 77°F) | 36 Months (refrigerated) 3 Months (room temperature storage not to exceed 25°C or 77°F) | 24 Months (refrigerated) | 24 Months | 30 Months (room temperature storage) | 36 Months (room temperature storage) | 36 Months | 24 Months | | |  
| **RECONSTITUTION TIME** | N/A (Liquid Solution) | None | None | N/A (Liquid Solution) | None | Several Minutes | None (Liquid Solution) | None (Liquid Solution) | None (Liquid Solution) | None (Liquid Solution) | None (Liquid Solution) |  
| **AVAILABLE CONCENTRATIONS** | 5% 10% | 10% | 10% | 5% 10% | 3 to 12% | 20% (200 mg/mL) | 5% 10% | 10% | 10% | 5% |  
| **MAXIMUM RECOMMENDED INFUSION RATE** | 4 mL/kg/hour | 8 mL/kg/hour | 10 mL/kg/hour | 8 mL/kg/hour | 3.5 mL/kg/hour | 4.8 mL/kg/hour | 4.8 mL/kg/hour | 4.8 mL/kg/hour | 4.8 mL/kg/hour | 4.8 mL/kg/hour | 4.2 mL/kg/hour |  
| **TIME TO INFUSE 35 gms** | Time will vary based on concentration and tolerance | Time will vary based on concentration and tolerance | | | | | | | | | |  
| **SUGAR CONTENT** | 20 mg/mL glucose | 40 mg/mL glucose | No added sugars | No added sugars | 5% D-sorbitol (polyol) | No added sugars | 1.67 gm sucrose per gram of protein | None | None | None | None | 100 mg/mL maltose |  
| **SODIUM CONTENT** | 8.5 mg/mL sodium chloride | 17 mg/mL sodium chloride | No added sodium | 8.5 mg/mL sodium chloride in recombinant human hyaluronidase. No added sodium in IgG | 10% 30 mL/mg/L | 0.100-0.140 mg sodium chloride | 200 mg sodium chloride per gram of protein | Trace Amounts (<35 mmol/L) | Trace Amounts | Trace Amounts | Trace Amounts | <30 mmol/L |  
| **OSMOLARITY/OSMOLALITY** | 630 mOsm/kg | 1250 mOsm/L | 240 - 300 mOsm/kg | 240 - 300 mOsm/kg | ≤ 510 mOsm/kg | 192 - 1074 mOsm/kg | 380 mOsm/kg | 240-370 mOsm/kg | 258 mOsm/kg | 258 mOsm/kg | 310 - 380 mOsm/kg |  
| **PH** | 6.8 ± 0.4 | 4.6 - 5.1 | 4.6 - 5.1 | 4.6 - 5.1 | 4.0 - 4.6 | 6.4 - 6.8 | 4.6 - 5.2 | 4.8 | 5.0 - 6.0 | 4.0 - 4.5 | 4.0 - 4.5 | 5.1 - 6.0 |  
| **IgG CONTENT** | ≤ 1 µg/mL | ≤ 2.2 µg/mL | N/A | 37 µg/mL | 37 µg/mL | Average: <4 mg/mL | Average: 4 - 20 mg/mL | ≤ 200 µg/mL | ≤ 50 mcg/mL | or ≤ 25 mg/mL | ≤ 100 mcg/mL | ≤ 100 µg/mL |  
| **APPROVED METHOD OF ADMINISTRATION** | Intronavenous | Intronavenous | Subcutaneous | Subcutaneous | Intronavenous | Intronavenous | Intronavenous | Subcutaneous | Intronavenous | Intronavenous | Subcutaneous | Intronavenous |  

1. 25 mg/kg for a 70 kg adult ≥ 35 yrs; % Concentrations: IgG 25 mL; 10% Concentrations: IgG 10 mL.  
2. Time will vary depending upon volume and tolerance. Using 30 grams as monthly dose, calculate weekly dose: 6.75 grams = 30 mL infused into 4 sites 0.5 mL/site up to 200 mL/hour, which can range from 45 mins to 3 hrs.  
3. No added sugars in the US.  
4. HYVOIA is a dual viral inactivation containing 10% IgG (100 mg/mL) and 160 LMW, recombinant human hyaluronidase.  
5. Shuter room temperature shelf-life of HYVOIA (28°C) compared to Gamgared Liquid (24 months) is due to the recombinant human hyaluronidase component of HYVOIA. The time to infuse is based on the maximal infusion rate. Check product label for storage temperature, which vary among Immune Globulin brands. Check package insert for detailed prescribing information. Information for each of the products listed above has been provided directly to IDP by the manufacturer of that product.  

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