

# UM Upper Chesapeake Health

## IVIG (Intravenous Immune Globulin)

### Orders For ADULTS

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ ACTUAL WEIGHT: \_\_\_\_\_ kg HEIGHT: \_\_\_\_\_ cm

#### INDICATIONS and DOSAGES:

- Use **Ideal Body Weight (IBW)** to dose IVIG. If Total Body Weight (actual weight) is greater than 20% over IBW, use **Adjusted Body Weight (see reverse side)**
- Pharmacy will verify dose, may adjust dose according to weight and will round dose to vial size

<input type="checkbox"/> Chronic inflammatory demyelinating polyneuropathy (CIDP)	<input type="checkbox"/> 400 mg/kg = _____ grams daily times _____ days (5 days)
<input type="checkbox"/> Chronic lymphocytic leukemia (CLL) with frequent infection	<input type="checkbox"/> 400 mg/kg = _____ grams every 4 weeks times _____ doses
<input type="checkbox"/> Guillain Barre syndrome	<input type="checkbox"/> 400 mg/kg = _____ grams daily times _____ days (5 days)
<input type="checkbox"/> Hemolytic anemia, autoimmune	<input type="checkbox"/> 400 mg/kg = _____ grams daily times _____ days (5 days)
<input type="checkbox"/> Idiopathic thrombocytopenia (ITP)	<input type="checkbox"/> 400 mg/kg = _____ grams daily times _____ days (2-5 days)
	<input type="checkbox"/> 1 gram/kg = _____ grams daily times _____ days (1-2 days)
<input type="checkbox"/> Kawasaki syndrome	<input type="checkbox"/> 400 mg/kg = _____ grams daily times _____ days (4 days)
<input type="checkbox"/> Myasthenia crisis	<input type="checkbox"/> 400 mg/kg = _____ grams daily times _____ days (5 days)
<input type="checkbox"/> Primary immunodeficiency Common variable immunodeficiency	<input type="checkbox"/> _____ mg/kg = _____ grams every _____ weeks times _____ doses (usual dose 200-800 mg/kg every 3-4 weeks based on IgG levels)
<input type="checkbox"/> Other indication and dosages: Indication: _____	<input type="checkbox"/> _____ mg/kg = _____ grams every _____ times _____ doses

#### IVIG PRODUCTS:

**IVIG product will be dispensed per pharmacy based on availability, unless specialized product is required** (see back page for information on IVIG products available at UCH)

Specialized Product: \_\_\_\_\_ Reason for use: \_\_\_\_\_

**PRE-MEDICATION** – (check appropriate box(es) if needed or if patient had prior reactions to IVIG):

Acetaminophen \_\_\_\_\_ mg PO times 1 dose (650 mg) 30 minutes prior to the infusion

Diphenhydramine \_\_\_\_\_ mg IV times 1 dose (25 mg) 30 minutes prior to the infusion

Diphenhydramine \_\_\_\_\_ mg PO times 1 dose (25 mg) 30 minutes prior to the infusion

Others: \_\_\_\_\_

**RATE OF ADMINISTRATION (titrate rate up as tolerated)** –If box is not checked, standard rate will be used (advance to higher rate only IF tolerating current rate)

<input type="checkbox"/> <b>STANDARD RATE</b> (RN will follow rate depending on the products below)		<input type="checkbox"/> <b>CUSTOMIZED RATE:</b>
<input type="checkbox"/> <b>FLEBOGAMMA (inpatient)</b> <b>Patients weighing LESS than 100kg:</b> 0.5 mL/kg/hr for 30 min, then 1 mL/kg/hr for 30 min, then 2 mL/kg/hr until completed  <b>Patients weighing 100kg or MORE:</b> 0.25 mL/kg/hr for 30 min, then 0.5 mL/kg/hr for 30 min, then 1 mL/kg/hr for 30 min, then 200mL/hr until completed	<input type="checkbox"/> <b>GAMUNEX-C (outpatient)</b> 0.6mL/kg/hr for 30 min, then 1.7 mL/kg/hr for 30 min, then 4 mL/kg/hr until completed  *Cautious use if patient has heart failure due to rapid infusion rate	_____ mL/hr for 30 minutes, then _____ mL/hr for 30 minutes, then _____ mL/hr until completed

IVIG should be administered in a dedicated infusion line with no other medications

**MONITORING:** Vital signs every 15 minutes times 2, then every 30 minutes times 1, then every hour until infusion completed.

**LABS:** \_\_\_\_\_

Authorized Prescriber Signature: \_\_\_\_\_ Date/Time: \_\_\_\_\_

53PIVIG 11/15

(for verbal/telephone orders)

## IDEAL BODY WEIGHT (IBW) TABLE in KG

**IBW Females = 45.5 kg + [2.3 X height (inches) greater than 5 feet]**

**IBW Males = 50 kg + [2.3 X height (inches) greater than 5 feet]**

FEET	5 ft 1	5 ft 2	5 ft 3	5 ft 4	5 ft 5	5 ft 6	5 ft 7	5 ft 8	5 ft 9	5 ft 10	5 ft 11
CM	153	155	158	160	163	165	168	170	173	175	178
INCH	61	62	63	64	65	66	67	68	69	70	71
MALE (kg)	52 kg	55 kg	57 kg	59 kg	62 kg	64 kg	66 kg	68 kg	71 kg	73 kg	75 kg
FEMALE (kg)	48 kg	50 kg	52 kg	55 kg	57 kg	59 kg	62 kg	64 kg	66 kg	69 kg	71 kg

FEET	6 ft	6 ft 1	6 ft 2	6 ft 3	6 ft 4	6 ft 5	6 ft 6	6 ft 7	6 ft 8	6 ft 9	6 ft 10
CM	180	183	185	188	190	193	195	198	200	203	205
INCH	72	73	74	75	76	77	78	79	80	81	82
MALE (kg)	78 kg	80 kg	82 kg	85 kg	87 kg	89 kg	91 kg	94 kg	96 kg	98 kg	101 kg
FEMALE (kg)	73 kg	75 kg	78 kg	80 kg	82 kg	85 kg	87 kg	89 kg	92 kg	94 kg	96 kg

**If TBW (actual weight) is greater than 20% IBW, (ie.  $TBW \div IBW$  is greater than 1.2), use ABW to calculate IVIG dosages**

(ABW= Adjusted Body Weight, IBW= Ideal Body Weight, TBW= Total Body Weight)

$$\text{Adjusted Body Weight} = \text{Ideal Body Weight} + 0.4 (\text{Actual Weight} - \text{Ideal Body Weight})$$

$$= \text{_____ kg} + 0.4 \times (\text{_____ kg} - \text{_____ kg}) = \text{_____ kg}$$

### INFORMATION

#### PHARMACY:

- Pharmacy will check dosage and may adjust dosage using IBW for most patients, or Adjusted Body Weight for patient weighing more than 20% IBW (per P&T committee and MEC approvals)
- Pharmacy will round dose to nearest vial size in adult patients only
- Pharmacy will dispense IVIG products based on availability. Available preferred products include Flebogamma 10% (inpatient) and Gamunex-C 10% (outpatient). These will be dispensed as our preferred products unless physician requests specialized product (must indicate the need of the specialized product) or if the preferred product is not available

	IgA content	Stabilizer	Osmolality
<b>Flebogamma 10%</b>	Less than 6 mcg/mL	5 % sorbitol	240-370 mOsm/L
<b>Gamunex-C 10%</b>	46 mcg/mL	Glycine	264 mOsm/L
<b>Privigen 10% *</b>	Less than or equal to 25 mcg/mL	Proline	240– 440 mOsm/kg

\* May use Privigen if the preferred product is not available or if patient does not tolerate the preferred products

#### NURSING:

- Infuse IVIG into a large vein in a separate infusion line.
- Filter is NOT required for Gamunex-C 10%, Flebogamma 10% or Privigen 10%.
- Monitor:
  - Renal function, urine output
  - Vital signs as per order
- If infusion-related reactions occur (flushing, change in HR, BP, urticaria, angioedema, respiratory distress...), consider decreasing rate or stopping infusion and notify prescriber

#### ADVERSE REACTIONS:

- Infusion-related: flushing, tachycardia, hypertension, hypotension, chest tightness, hypersensitivity reactions
- Renal: acute renal failure, acute tubular necrosis (can occur 1-2 days after initiation of IVIG)
- Thrombotic complications (most events occur during or immediately after completion of infusion): myocardial infarction, stroke, DVT/PE
- Others: CNS (anxiety, headache, drowsiness), dermatologic (rash, pruritis), GI (abdominal cramp, N/V), respiratory (SOB, wheezing), pain and irritation at injection site