UNIVERSITY of MARYLAND MEDICAL CENTER
KAUFMAN INFUSION CENTER

Provider Orders for: (Adult)
IVIG (Intravenous Immune Globulin)

Patient Name: _____
DOB: _____

☐ = ***must*** **check off to order / ☑ *automatically* initiated unless crossed out**

DATE: ____/____/____ TIME: _____ ACTUAL WEIGHT: ____ **kg** HEIGHT: ____**cm ICD10 CODE: _____**

INDICATIONS / Considerations for Use / and DOSAGES:

Provider: **Please select dose order beside appropriate patient condition.**
***Note:** **Order set contains a partial list of Approved Indications; Refer to guidelines for complete list.**
Pharmacy: **Dose by Ideal Body Weight (IBW);** Use Actual Body Weight ***if*** less than patient's ideal body weight**.**

Hematologic/Immunologic Indications	Considerations for Use	Dose
Autoimmune Hemolytic Anemia	**Severe autoimmune neutropenia unresponsive to treatment with G-CSF or relapse of severe autoimmune neutropenia in a patient demonstrated to have previously responded to Ig therapy**	☐ 1 g/kg IV times 5 days
Hypogammaglobulinemia Acquired [i.e. Chronic Lymphocytic Leukemia (CLL)]	**Secondary to malignancy, chemotherapy and/or immunotherapy; Treatment of documented CMV disease**	**Treatment** dose: ☐ 0.5 g/kg daily times 3 doses ***--or--*** ☐ 0.5 g/kg every other day times 3 doses
Hypogammaglobulinemia Primary: [Primary immunodeficiency / Common variable immunodeficiency]	**First line therapy**	☐ 0.4 g/kg IV every 4 weeks
Idiopathic thrombocytopenia (ITP)	**Platelet count less than 20,000 per microliter or life-threatening bleeding**	☐ 0.4 g/kg IV daily times 5 days ***--or--*** ☐ 1 g/kg IV daily times 2 days
Neurologic Indications	**Considerations for Use**	**Dose**
Chronic inflammatory demyelinating polyneuropathy (CIDP)	**Intended for new-onset CIDP or CIDP relapses**	☐ 0.4 g/kg IV daily times 5 days
Guillain Barre syndrome	**Intended for severe or progressive GBS within 2 weeks of symptom onset**	☐ 0.4 g/kg IV daily times 5 days
Multifocal Motor Neuropathy	**First Line therapy for patients with documented MMN diagnosis**	☐ 0.4 g/kg IV daily times 5 days
Myasthenia crisis	**Intended for myasthenic crises following a trial of first line therapies**	☐ 0.4 g/kg IV daily times 5 days

IVIG PRODUCTS:

☑ **IVIG product will be dispensed per pharmacy based on availability, unless specialized product is required; Gammagard Liquid 10% (UMMS preferred formulation; Alternative products may be used for those patients who did not tolerate Gammagard Liquid 10%** (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 650 mg PO times 1 dose 30 minutes prior to the infusion
☐ Diphenhydramine 25 mg IV times 1 dose 30 minutes prior to the infusion
☐ Diphenhydramine 25 mg PO times 1 dose 30 minutes prior to the infusion

Other medications: _____

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

IVIG STANDARD RATE of Administration:
Initial infusion rate: 0.5 mL/kg/hr; **Increase** rate every 30 minutes by increments of 0.5 mL/kg/hr;
Max rate: 5 mL/kg/hr.
Patients at risk of acute renal failure, heart failure or thrombotic complications should not exceed a rate of 2 mL/kg/hr.

☐ **CUSTOMIZED RATE (Must not EXCEED above rate):**
_____ mL/hr for 30 min; then _____ mL//hr for 30 min; then _____ mL/hr until completed

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

☑ **MONITORING**:
Initial Infusion: Vital signs every 15 minutes for the first 60 minutes, then every 60 minutes until infusion is finished.
Subsequent infusions (without reactions): Vital signs every 15 minutes for the first 30 minutes, then every 60 minutes until infusion is complete.

LABS: _____

Authorized Prescriber Signature: _____ Date/Time: _____
(for verbal/telephone orders)

INFORMATION

IDEAL BODY WEIGHT (IBW) TABLE in KG																							
IBW Males = 50 kg + [2.3 X height (inches) greater than 5 feet]; IBW Females = 45.5 kg + [2.3 X height (inches) greater than 5 feet]																							
FEET/INCHES	5' 1"	5' 2"	5' 3"	5' 4"	5' 5"	5' 6"	5' 7"	5' 8"	5' 9"	5' 10"	5' 11"	6'	6' 1"	6' 2"	6' 3"	6' 4"	6' 5"	6' 6"	6' 7"	6' 8"	6' 9"	6' 10"
INCH	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82
CM	153	155	158	160	163	165	168	170	173	175	178	180	183	185	188	190	193	195	198	200	203	205
MALE (kg)	52 kg	55 kg	57 kg	59 kg	62 kg	64 kg	66 kg	68 kg	71 kg	73 kg	75 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)	48 kg	50 kg	52 kg	55 kg	57 kg	59 kg	62 kg	64 kg	66 kg	69 kg	71 kg	73 kg	75 kg	78 kg	80 kg	82 kg	85 kg	87 kg	89 kg	92 kg	94 kg	96 kg

PHARMACY:

- **Pharmacy: Dose by Ideal Body Weight (IBW);** Actual Body Weight will be used in any patient if their actual body weight is less than their ideal body weight**.**
- Pharmacy will round dose to nearest vial size in adult patients only.
- Pharmacy will dispense IVIG products based on availability. Available preferred product: Gammagard 10%. Gammagard 10% will be dispensed as our preferred product 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
Preferred IVIG Product:			
Gammagard 10%	Average 37 mcg/mL	Glycine	240-300 mOsm/L
Alternative IVIG Products if indicated/required:			
1 - Gamunex-C 10%	46 mcg/mL	Glycine	258 mOsm/L
2 - Flebogamma 10%	Average less than 3 mcg/mL	Sorbitol	240 – 370 mOsm/L
3 - Privigen 10%	Less than or equal to 25 mcg/mL	Proline	240 - 440 mOsm/kg
Reference: https://primaryimmune.org/sites/default/files/publications/Immunoglobulin%20Product%20Chart.pdf **April 2018**			

NURSING:

- Infuse IVIG into a large vein in a separate infusion line.
- Filter is NOT required for **Gammagard 10%,** 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…), Stop infusion, Notify prescriber, Consider decreasing rate

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, pruritus), GI (abdominal cramp, N/V), respiratory (SOB, wheezing), pain and irritation at injection site