IVIG Pharmacist Review

Privigen® is the primary formulary IVIG product for inpatient and outpatient use at UConn Health-John Dempsey Hospital. Gammagard S/D® low IgA is reserved for patients who cannot tolerate Privigen®. The IVIG Policy & Procedure lists approved-indications at UConn Health-John Dempsey Hospital. ***Other uses of IVIG require approval prior to administration by P & T Committee Chair***.

Pharmacists reviewing IVIG orders should: 1). Confirm ordered indication is approved; 2.) Validate dosing appropriate & patient's IVIG history; 3.) Confirm product selected to minimize waste; 4.) Document in Pharmacy Siemens Notes & other areas as needed (e.g. outpatient IVIG files central pharmacy).

	Approved IVIG Indication	***Description***	***Usual Dosing †***
Primary indication	Hypogammaglobulinemia *	Treatment of hypogammaglobulinemia (Ig level < 400 mg/dl), in the setting of documented bacterial infection or as prophylaxis in hypogammaglobulinemia patients with history of recurrent infection	0.3 – 0.5 g/kg to be repeated monthly if needed
Hematologic	Automimmune hemolytic anemia (AIHA)	Treatment in those unresponsive to glucocorticoid therapy, splenectomy, and immunosuppressive therapy (e.g. cyclophosphamide, azathioprine, rituximab)	0.5 – 2 g/kg
	Chronic lymphocytic leukemia (CLL)	CLL patients with hypogammaglobinemia (Ig < 400 mg/dl) with pneumonia or history of recurrent documented bacterial pneumonias who fail to respond to multiple treatment courses	0.2 – 0.5 g/kg given monthly
	Idiopathic thrombocytopenic purpura (ITP) and bleeding *	ITP patients when rapid correction of platelet count is needed, for Rh-negative patients with a history of splenectomy or for patients who are not candidates for intravenous Rho(D) immune globulin; Rho(D) immune globulin is equally effective for Rh-positive patients with an intact spleen	Total dose of 1-2 g/kg given in divided doses over 2 to 5 days
	Multiple myeloma	Treatment of patients with stable (plateau phase) disease and high risk of recurrent infections	
	Neonatal alloimmune thrombocytopenia	Treatment where other interventions (e.g. steroids, platelets) are unsuccessful or contraindicated; treatment of women with a history of prior thrombocytopenic pregnancy and positive antiplatelet serology	Total dose of 1-2 g/kg in divided doses over 2 to 5 days
	Neonatal hemolytic disease	Treatment of neonates who are unresponsive to phototherapy or are in imminent need of exchange transfusion	0.5 – 2 g/kg
	Post-transfusion purpura	For severely affected patients with post-transfusion purpura	1-2 g/kg given over 1-2 days
	Pure red cell aplasia	May be used in patients with documented parvovirus B19 infection and severe anemia	
Infectious	Kawasaki syndrome		2 g/kg x 1 dose
	Neonatal hypogammaglobulinemia, high risk	Very low birth weight infants (< 1500 g) with infection of high morbidity	
	Pediatric HIV infection		
	Toxic shock syndrome or toxic necrotizing fasciitis due to group A streptococcus	Treatment of critically-ill patients with a documentation of presence of fasciitis and microbiologic data consistent with invasive streptococcal infection	0.5 g/kg with a single repeat dose if no improvement is seen
Neurologic	Chronic inflammatory demye-linating polyneuropathy (CIDP) *	Treatment of CIDP including multifocal motor neuropathy; Multiple courses of treatment are typically given; Alternative therapies, incl. plasmapheresis and glucocorticoids, should be considered for patients who fail to respond to multiple treatment courses.	0.4 g/kg/day x 5 days is one course of treatment, repeated monthly
	Guillain-Barré syndrome *	Second-line treatment after plasmapheresis	0.4 g/kg/day x 5 days
	Myasthenia gravis *	Treatment of patients with severe myasthenia gravis and acute severe decompensation when other treatments (e.g. steroids, plasmapheresis) have been unsuccessful or are contraindicated; plasmapheresis is the primary treatment of choice	2 g/kg over 2-5 days
Rheumatologic/ Dermatologic	Dermatomyositis **	Treatment in patients with severe active illness for whom other interventions have been unsuccessful; glucocorticoids are the initial treatment of choice followed by azathioprine or methotrexate	1-2 g/kg over 1-2 days
	Polymyositis **	Treatment in patients with severe active illness for whom other interventions have been unsuccessful; glucocorticoids are the initial treatment of choice followed by azathioprine or methotrexate	
	Systemic lupus erythematosus (SLE)	Treatment in patients with severe active SLE for whom other interventions (e.g. glucocorticoids) have been unsuccessful	
	Systemic vasculitic syndromes (i.e. vasculitis) ***	Treatment in patients with severe active illness for whom other interventions (e.g. gluococorticoids) have been unsuccessful	
Transplant	Bone marrow transplant	As prophylaxis against infection in hypogammaglobulinemia (Ig level < 400 mg/dl)	0.5 g/kg x 1 dose per month
	Solid organ transplant	Treatment for or prevention of infection in patients with hypogammaglobulinemia (Ig level < 400 mg/dl); patients undergoing multiple courses of plasmapheresis as treatment for allograft rejection or for other indications may receive IVIG at the completion of therapy if their Ig level is < 400 mg/dl	

****** Denotes indications built within prescriber order entry system (POE) as drop down for IVIG; Also "Hepatitis A" choice for GamaSTAN S/D®.*
*** Indication "Inflammatory myopathy" was built as drop down for IVIG; *** Indication "Sjogren's vasculitis" was built as drop down for IVIG*
NB: "Other" choice built for prescriber to specify indication free-form; † Consult product literature & other references for additional info as needed.

Reference: IVIG Policy and Procedure (John Dempsey Hospital – Department of Pharmacy Services), 11/20/13.