***UCxx* Medical Center**
Adult Intravenous Immunoglobulin (IVIG) Consensus Guidelines
Updated April *2023*

Executive Summary

The purpose of this guideline is to provide recommendations to optimize the use of IVIG in adult patients at *UCxx Medical Center*. Standardization of IVIG prescribing and dosing will promote appropriate use, cost-effectiveness, and improved patient outcomes.

The following table contains guidelines for IVIG use. The table is organized by levels of evidence. "Likely benefit/first-line" includes indications with evidence supported by randomized controlled trials, meta-analyses, and/or recommended in published consensus guidelines. "May benefit/second line" includes indications with less evidence of benefit compared to other therapies. "Unclear benefit" includes indications with limited or no evidence with IVIG use.

Dosing recommendations are based on FDA-labeled indications if available, clear recommendations found in the literature, or expert opinion.

The IVIG dose is generated based on ideal body weight (IBW) if the patient's height is available or total body weight (TBW) if height is unavailable. Actual body weight will be used if it is less than IBW. IVIG dosing may be adjusted per pharmacy protocol to maximize efficacy and safety and promote appropriate use of a medication currently in short supply. All doses will be rounded to the nearest vial size, in accordance with site policies and procedures.

	Likely Benefit First-Line	
Indication	**Description**	**Dosing**
Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)[1,2]	May be used as monotherapy, as an alternative to plasmapheresis, or in combination with other therapies, including: - Corticosteroids - Immunosuppressants	Induction: 2 gram/kg over 2 – 5 days Maintenance doses: either 0.5 gram/kg, 1 gram/kg, or 2 gram/kg every 3 weeks

Hypogammaglobulinemia[6-14]	Prevention of bacterial infection in patients with IgG < 400 mg/dL	0.4 g/kg IV x1; may repeat monthly if IgG < 400 mg/dL
Primary Humoral Immunodeficiency[15]	May be used first-line for treatment of multiple primary immunodeficiency disorders, including: - Congenital agammaglobulinemia - X-linked agammaglobulinemia - Common variable immunodeficiency - Severe combined immunodeficiency - Wiskott-Aldrich syndrome	0.4 g/kg IV x1; may repeat monthly if IgG < 400 mg/dL
Immune Thrombocytopenic Purpura (ITP)[16-19]	May be used for management of ITP in patients with active bleeding or platelet count [< 30,000/mm^3]	1 g/kg daily for 2 days
Multifocal Motor Neuropathy (MMN)[20-22]	May be used for patients confirmed diagnosis with MMN	0.4 g/kg x 5 days induction; Followed by 1 g/kg q3 weeks
Solid Organ Transplant:[30-33] **(1) Immunomodulation** **(2) Antibody-mediated Rejection (AMR)**	(1) Immunomodulation: may be used to reduce preformed antibodies prior to transplantation (2) AMR: may be used in patients with evidence of active rejection	2 g/kg divided over 2-4 days (maximum 140 g) 0.1 g/kg following plasmapheresis (maximum 2 g/kg)
Dermatomyositis/Poly-myositis[34]	Previously treated with glucocorticoid or other immunosuppressive and had no response. Previous treatment must have been trialed for 90 days	2 g/kg every 4 weeks

Abbreviations: LD = loading dose; MD = maintenance dose

May Benefit Second-Line		
Indication	**Description**	**Dosing**
Guillain-Barré Syndrome[23] *	May be useful as an alternative to plasmapheresis	0.4 g/kg x 5 days or 1 g/kg x 2 days
Secondary Antibody Deficiency (including Hematopoietic Stem Cell Transplant (HSCT), Immunologic Complications)[24]	May be useful for patients with hypogammaglobulinemia (IgG < 400 mg/dL) with or without recurrent infections	0.4-0.5 g/kg monthly as needed *-Default to 0.4 g/kg on order set*
Myasthenia Gravis[25]*	May be useful for patients with acute exacerbation who have failed or have contraindications to one or more firstline treatment modalities, including: High-dose corticosteroids Plasmapheresis	2 g/kg divided into 3-5 days
Idiopathic Inflammatory Myopathy[26]	For steroid refractory (other first line methotrexate, cyclosporine, azathioprine, mycophenolate mofetil, rituximab)	1 g/kg x 1 dose
Streptococcal Toxic Shock Syndrome[27]	Adjunctive therapy to neutralize bacterial exotoxins	2 g/kg x 1 dose

Postnatal IVIG for Multiple Sclerosis Relapse[28,29]	During pregnancy, post-partum, non-responsive to steroids	0.4 g/kg x 5 days

*Adjusted weight may be considered

Unclear Benefit		
Indication	**Description**	**Dosing**
Chronic lymphocytic leukemia (CLL)[3,4,5]	Prevention of bacterial infection in patients with hypogammaglobulinemia (IgG < 500 mg/dL) and/or recurrent bacterial infections	0.2-0.4 g/kg every 3 to 4 wks

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