



Pharmacy Department Policy Intravenous Immune Globulin Utilization

A. EFFECTIVE DATE :

March 15, 2022

B. PURPOSE :

To outline the approved indications and dosing of intravenous immune globulin (IVIG) preparations at UConn Health John Dempsey Hospital.

C. POLICY :

All providers will prescribe IVIG as clinically necessary to patients of UConn Health in accordance with the procedures outlined below.

D. SCOPE :

This policy applies to all JDH clinical care areas.

E. DEFINITIONS :

1. IVIG – Intravenous immune globulin
2. Off-label – Indications that have not been studied and approved by the Food and Drug Administration (FDA)
3. Ideal body weight (IBW)
 - i. Males: $IBW = 50 \text{ kg} + 2.3 \text{ kg for each inch over 5 feet}$
 - ii. Females: $IBW = 45.5 \text{ kg} + 2.3 \text{ kg for each inch over 5 feet}$
4. Adjusted body weight (ABW)
 - i. $ABW = IBW + 0.4 (\text{Actual BW} - IBW)$

F. MATERIAL(S) NEEDED :

None

G. PROCEDURE :

1. **All providers and pharmacists will observe the following IVIG dosing recommendations:**
 - a. All patients must have a documented weight and height prior to entering orders for IVIG.
 - b. Adult doses should be based on ideal body weight (IBW) unless dosing to a specific and measurable IgG level^{1,2,3}
 - c. If actual body weight is less than IBW, dose according to actual weight
 - d. If actual body weight is $\geq 120\%$ of IBW, doses should be based on adjusted body weight (ABW)
 - e. Adult doses will be rounded to the nearest available full vial size

2. **Providers should only order IVIG during inpatient admissions where clinically necessary and were required to facilitate discharge**
 - a. Continuation of IVIG therapy for approved indications falling within an unrelated inpatient admission should be deferred until discharge whenever possible
3. **Pharmacy will prepare and dispense all IVIG doses**
 - a. IVIG ordered for inpatient administration that requires more than one vial of drug per dose will be pooled by the pharmacy into an appropriate evacuated container
 - i. All IVIG pooling will be performed under sterile conditions in accordance with the Cleanroom Standard Operating Policy and Procedure (Clinical Protocol O-002)
 - b. IVIG doses ordered for outpatient administration will be dispensed as whole vials and will not be pooled unless clinically necessary or required based on product type
 - i. GAMMAGARD S/D must be reconstituted prior to use and will be routinely pooled by pharmacy prior to administration
4. **Pharmacy will maintain information on approved indications that also include rate titration calculations for administration to be found on the UCONN Health pharmacy intranet page**
(<https://health.uconn.edu/pharmacy/staff-references/ivig/>)
 - a. Pharmacy labels for dispensed doses will list administration instructions including the need to filter particular IVIG products
 - i. Use of a 0.15 micron filter is required for administration of GAMMAGARD S/D
 - ii. Use of a filter for other products is not required unless specified on the pharmacy label
5. **Providers will document the associated IVIG indication upon entering the order**
6. **Providers and pharmacists should adhere to FDA approved indications for use of IVIG at UCONN Health.**
7. **Providers ordering inpatient IVIG for any other indication must obtain approval from a Pharmacy Clinical Coordinator**
 - a. The prescribing physician will be expected to complete a Non-Formulary Request Form in accordance with the Non-Formulary Medication Review Policy
 - b. The Pharmacy Clinical Coordinator will review the case and proposed indication for use with the prescribing physician
 - c. The pharmacy will periodically review and present to P&T any trends in IVIG use for non-approved indications

H. ATTACHMENTS :

1. Quick IVIG Reference Sheet for Pharmacists ([010915-IVIG-Quick-Reference.pdf \(uconn.edu\)](#))
2. Non-Formulary Request Form ([Request For Non-Formulary Drug \(uconn.edu\)](#))

I. REFERENCES :

1. Rocchio MA, Hussey AP, Southard RA, Szumita PM. Impact of ideal body weight dosing for all inpatient i.v. immune globulin indications. Am J Health Syst Pharm. 2013;70(9):751-752.
2. Khan S, Grimbacher B, Boecking C, et al. Serum trough IgG level and annual intravenous immunoglobulin dose are not related to body size in patients on regular replacement therapy. Drug Metab Lett. 2011;5(2):132-136.

3. Stump SE, Schepers AJ, Jones AR, Alexander MD, Auten JJ. Comparison of weight-based dosing strategies for intravenous immunoglobulin in patients with hematologic malignancies. *Pharmacotherapy*. 2017;37:1530-1536.
4. Perez EE, Orange JS, Bonilla F et al. Update on the use of immune globulin in human disease: A review of evidence. *J Allergy Clin Immunol*. 2017;129(3S):S1-S46.

J. SEARCH WORDS :

Intravenous immune globulin, IVIG, IGIV, Immunoglobulin

K. ENFORCEMENT:

Violations of this policy or associated procedures may result in appropriate disciplinary measures in accordance with University By-Laws, General Rules of Conduct for All University Employees, applicable collective bargaining agreements, the University of Connecticut Student Code, other applicable University Policies, or as outlined in any procedures document related to this policy.

L. STAKEHOLDER APPROVALS :

On File

M. COMMITTEE APPROVALS :

Pharmacy and Therapeutics Committee (Approved 7/28/21)

N. FINAL APPROVAL :

- | | |
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| <p>1. <u>Bruce T. Liang, MD (Signed)</u>
 Bruce T. Liang, MD
 UConn Health Interim Chief Executive Officer</p> | <p><u>04/10/2022</u>
 Date</p> |
| <p>2. <u>Anne D. Horbatuck (Signed)</u>
 Anne D. Horbatuck, RN, BSN, MBA
 Clinical Policy Committee Co-Chair</p> | <p><u>03/29/2022</u>
 Date</p> |
| <p>3. <u>Scott Allen, MD (Signed)</u>
 Scott Allen, MD
 Clinical Policy Committee Co-Chair</p> | <p><u>04/04/2022</u>
 Date</p> |
| <p>4. <u>Caryl Ryan (Signed)</u>
 Caryl Ryan, MS, BSN, RN
 Chief Operating Officer, JDH
 VP Quality and Patient Services & Chief Nursing Officer</p> | <p><u>03/31/2022</u>
 Date</p> |

O. REVISION HISTORY :

Date Issued: 11/20/13

Date Revised: 11/5/2015, 11/15/17, 7/28/21, 03/15/2022

Date Reviewed: 11/5/2015, 11/15/17, 7/28/21