These Clinical Guidelines have been created using resources that were current as of the "Reviewed" date noted at the beginning of the document. Clinicians should refer to the manufacturer's Prescribing Information (or equivalent) for the most up-to-date information. While CarepathRx has published these Clinical Guidelines after a close review of available literature and a clinical review process, given the evolving nature and complexity of modern pharmaceutical products, CarepathRx does not and cannot warrant or guarantee that these Clinical Guidelines reflect the objectively best or highest standard of care at any given time.

Nothing within these Clinical Guidelines is intended to supersede or interfere with any individual clinician's decision-making or professional judgment with respect to either (1) prescribing or dispensing the drug or product in question or (2) the overall treatment plan for an individual patient.

Nipocalimab-aahu (Imaavy) Clinical Guideline for Home Intravenous Therapy

Section: Clinical Guidelines
Policy ID: CG035
Effective: 8/7/2025
Reviewed: N/A
Revised: N/A
Approved by, Title and Date Approved: Kathleen Patrick, President, 8/7/2025

I. BACKGROUND

Imaavy (nipocalimab-aahu) is a fully human IgG1 monoclonal antibody used for the treatment of generalized myasthenia gravis (gMG) in adult and pediatric patients 12 years of age and older who are anti-acetylcholine receptor (AChR) or anti-muscle-specific tyrosine kinase (MuSK) antibody positive. Nipocalimab-aahu binds to the neonatal Fc receptor (FcRn), resulting in the reduction of circulating IgG. Nipocalimab-aahu was formulated for intravenous route of administration. The following outlines the procedures for servicing patients in need of outpatient nipocalimab-aahu home infusions.

II. PATIENT ACCEPTANCE CRITERIA

A. All candidates for home care service must be evaluated by the clinician(s) and deemed appropriate to receive home care based upon admission criteria.

B. The decision to administer a first dose in the home by an infusion nurse will be determined on a case-by-case basis and reviewed by nursing and pharmacy management. The following criteria will be evaluated:

1. Prescriber preference
2. Allergy profile
3. Age
4. Other relevant social and/or medical history

C. Physician orders for nipocalimab-aahu must include:

1. Patient weight for nipocalimab-aahu
2. Drug and dose (weight based)
3. Frequency of administration
4. Emergency medications per protocol
5. Orders for pre-medications
6. Line care protocol
7. Routine lab monitoring, if applicable

D. Ensure patients are up to date on vaccinations.

1. Because nipocalimab-aahu causes transient reduction in IgG levels, immunization with live-attenuated or live vaccines is not recommended during treatment with nipocalimab-aahu.

Evaluate the need to administer age-appropriate immunizations according to immunization guidelines before initiation of a new treatment cycle with nipocalimab-aahu.

E. Baseline labs or tests prior to starting therapy

F. Dispensing pharmacy treatment protocol for anaphylaxis will be instituted unless a more comprehensive patient-specific orders are provided by physician. See policy, Management of Allergic/Anaphylactic Reactions (Appendices A and B).

III. PHARMACOLOGY OVERVIEW

A. Indications: generalized myasthenia gravis (gMG) in adult and pediatric patients 12 years of age and older who are anti-acetylcholine receptor (AChR) or anti-muscle-specific tyrosine kinase (MuSK) antibody positive.

B. Dosing:

1. Intravenous:

a. Initial dosage: 30 mg/kg once

b. Maintenance dosage (two weeks after initial dosage): 15 mg/kg. Continue maintenance dosage every 2 weeks thereafter.

* Dosing is based off actual body weight. Nipocalimab-aahu has not been studied in extremes of body weights

C. Dose Adjustment:

1. No dose adjustment is required in patients with renal impairment.

2. No dose adjustment is required in patients with hepatic impairment.

3. If a scheduled infusion appointment is missed, the maintenance dosage of nipocalimab-aahu should be administered as soon as possible. Resume dosing every two weeks thereafter.

D. Duration of therapy is dependent on patient response and adverse reactions.

E. Contraindications: history of serious hypersensitivity reaction to nipocalimab or to any of the excipients in nipocalimab-aahu.

F. Warnings and Precautions:

1. **Infections –** may increase the risk of infection. Serious infections were reported in 7% of patients treated with nipocalimab-aahu. Patients may be at an increased risk of activation of latent viral infections, such as herpes zoster. Delay administration of nipocalimab-aahu in patients with an active infection. Monitor for signs and symptoms of infection. If serious infection occurs, administer appropriate treatment and consider withholding nipocalimab-aahu until the infection has resolved.

2. **Immunizations –** Immunization with vaccines during treatment has not been studied. The safety of immunization with live or live-attenuated vaccines and the response to immunization with any vaccine are unknown. Due to the reduction in IgG levels, vaccination with live-attenuated or live vaccines is not recommended during treatment. Administer age-appropriate vaccines according to immunization guidelines before initiation of a new treatment cycle with nipocalimab-aahu.
3. **Hypersensitivity Reactions –** Angioedema, anaphylaxis, rash, urticaria, and eczema have been observed in patients treated with nipocalimab-aahu. In clinical trials, hypersensitivity reactions were mild or moderate in severity, occurred within one hour to 2 weeks of administration, and led to one patient discontinuing treatment. Monitor the patient during treatment with nipocalimab-aahu and for 30 minutes after the administration is complete for clinical signs and symptoms of hypersensitivity reactions. If a hypersensitivity reaction occurs, discontinue the infusion and institute appropriate therapy.
4. **Infusion-Related Reactions –** In clinical trials, infusion-related reactions, including headache, influenza-like illness, rash, nausea, fatigue, dizziness, chills, and erythema were observed in patients treated with nipocaliamb-aahu. Infusion-related reactions were mild to moderate in severity and occurred within one hour to 2 days of administration. Monitor patients during treatment with nipocalimab-aahu and for 30 minutes after each infusion. If a severe infusion-related reaction occurs, discontinue the infusion and initiate appropriate therapy; consider the risks and benefits of readministering. If a mild to moderate infusion-related reaction occurs, may consider close clinical observation, slower infusion rates, and pre-medication.
5. **Pregnancy and lactation –** There are limited data on the use of nipocalimab-aahu in pregnant people to inform a drug-associated risk of major birth defects, miscarriage, or adverse maternal or fetal outcomes. There was no evidence of direct adverse effects on fetal development following administration of nipocalimab-aahu to pregnant monkeys; however, adverse effects on the placenta were associated with fetal loss at both doses tested. There is a pregnancy safety study for nipocalimab-aahu; if nipocalimab-aahu is administered during pregnancy, or if a patient becomes pregnant while receiving nipocalimab-aahu, exposure should be reported by contacting Janssen at 1-800-526-7736 or www.IMAAVY.com. Monoclonal antibodies are increasingly transported across the placenta as pregnancy progresses, with the largest amount transferred during the third trimester. Therefore, nipocalimab-aahu may be transmitted from the mother to the developing fetus. Nipocalimab-aahu is excreted in human colostrum and breastmilk based on limited data from an investigational study. There are insufficient data on the effect of nipocalimab-aahu in the breastfed infant. There are no data on the effect of nipocalimab-aahu on milk production.

G. Pharmacokinetics:

1. Nipocalimab-aahu exhibits nonlinear pharmacokinetics and following a single intravenous infusion at doses ranging from 0.3 to 60 mg/kg (4 times the recommended maintenance dosage) in healthy participants, Cmax of nipocalimab-aahu increased in a dose-proportional manner while AUC increased in a greater than dose-proportional manner.
2. Distribution – mean volume of distribution is 2.67 L.
3. Metabolism and elimination – Nipocalimab is expected to be degraded by proteolytic enzymes into small peptides and amino acids. Nipocalimab exhibits concentration-dependent pharmacokinetics. After a single intravenous administration of 15 mg/kg nipocalimab-aahu, the mean clearance is 0.0627 L/h and half-life is 29.3 hours.

H. Adverse Reactions: Respiratory tract infections (18%), hypercholesterolemia (24%), peripheral edema (12%), muscle spasms (12%), hypersensitivity reactions (8%), abdominal pain (8%), back pain

(8%), urinary tract infections (6%), hypertension (5%), diarrhea (7%), nausea (5%), anemia (6%), insomnia (5%), dizziness (5%), cough (7%), fever (7%).

I. Drug Interactions:

1. Concomitant use with medications that bind to the human neonatal Fc receptor (FcRn) (e.g., immunoglobulin products, monoclonal antibodies, or antibody derivatives containing the human Fc domain of the IgG subclass) may lower systemic exposures and reduce effectiveness of such medications. Closely monitor for reduced effectiveness of medications that bind to the human neonatal Fc receptor. When concomitant long-term use of such medications is essential for patient care, consider discontinuing nipocalimab-aahu and using alternative therapies.
2. Drug-drug interactions may exist. Consult interaction database for patient specific assessment.

IV. ADMINISTRATIVE GUIDELINES

A. Administration: IV infusions should be given immediately after reconstitution and dilution. Begin infusion within 4 hours of preparation per current USP Immediate-Use Guidelines. **Use in-line or add-on 0.2 micron low protein binding filter.**

B. Administration sets must be made of either polybutadiene, polyethylene, polyurethane, polypropylene, or polyvinylchloride.

C. Do not co-administer with other products in the same IV line.

V. NURSING PROCEDURE

A. Supplies may include but are not limited to:

1. Alcohol Swabs
2. Gloves
3. Tape
4. Peripheral IV access supplies for patients requiring peripheral IV access
   a. IV start Kit
   b. Peripheral IV catheter (ex. 22 Gauge x1" and 24 Gauge x ¾")
   c. Extension set 8" with needless connector
5. Port access supplies for patients with a port
   a. Port needle (ex. 22 Gauge x ¾ to 1" safe step)
   b. Extension set 8" needless connector
   c. Central line dressing change kit
6. IV Pole
7. Needleless connector
8. IV administration set with an in-line or add on 0.22-micron filter
9. Syringes (various sizes depending on dose) with needles (20 G x 1")
10. Sharp container

B. Intravenous nipocalimab-aahu prescription items

1. Vials of nipocalimab-aahu (185 mg/mL)
2. Dilution bag
    a. 250 mL volume sodium chloride 0.9% for patients ≥40 kg
    b. 100 mL volume sodium chloride 0.9% for patients 12 years and older and <40 kg
3. Bag of sodium chloride 0.9% for flushing (50 mL)

C. How Supplied:

1. Nipocalimab-aahu injection is a sterile, preservative-free, colorless to slightly brownish, clear to slightly opalescent solution for intravenous use after dilution, supplied as cartons containing a single-dose vial per carton as either 300 mg/1.62 mL (185 mg/mL) or 1,200 mg/6.5 mL (185 mg/mL).

D. Storage and Handling:

1. Store vials refrigerated at 2ºC to 8ºC (36ºF to 46ºF) in the original carton to protect from light until the time of use. Do not freeze. Do not shake.

E. Compatibility:

1. Nipocalimab-aahu is stable in 0.9% sodium chloride. No other diluents may be used to prepare nipocalimab-aahu diluted solution.

F. Procedures: Preparation of product, Infusion rates, post infusion monitoring time.

1. Explain the reasoning for visit and use of nipocalimab-aahu.
2. Put on gloves.
3. Assess for signs and symptoms of infection prior to establishing venous access and preparing medication. Notify ordering physician and pharmacist if signs or symptoms are present.
4. Establish venous access prior to preparation of drug.
5. Counsel patient on warnings, precautions, and potential side effects including but not limited to: respiratory tract infections, peripheral edema, muscle spasms, hypersensitivity reactions, abdominal pain, and back pain.
6. If the diluted solution is refrigerated prior to administration, allow to warm to room temperature. Inspect nipocalimab-aahu vials prior to preparation. Do not use it if opaque particles, discoloration, or other foreign particles are present.
7. Prepare infusion:
    a. Calculate the dosage (mg), total drug volume (mL) of nipocalimab-aahu solution required, and the number of nipocalimab-aahu vials needed, based on the patient's current weight.
        i. Each single-dose vial of nipocalimab-aahu is at a concentration of 185 mg/mL.
        ii. Initial dosage: 30 mg/kg once over at least 30 minutes

iii. Maintenance dosage (two weeks after initial dosage): 15 mg/kg over at least 15 minutes. Continue maintenance dosage every 2 weeks thereafter.

$$\text{Volume (mL)} = \frac{\text{patient's body weight (kg) x prescribed dose X mg/kg}}{\text{concentration of nipocaliamb-aahu 185 mg/mL}}$$

b. Gently withdraw the calculated volume of nipocalimab-aahu from the vial(s). Discard any unused portion of the vials.

c. Prior to adding drug, withdraw same volume of sodium chloride from bag as the amount of drug that will be added for total volume and discard.

d. Dilute total volume withdrawn of nipocalimab-aahu by adding to an infusion container containing 0.9% sodium chloride injection to a final volume of:

i. 250 mL for patients who weigh 40 kg or more, or
ii. 100 mL for patients who weigh less than 40 kg.

e. Gently invert the admixture at least 10 times to mix the solution. Do not shake.

8. Post infusion flush: After administration of nipocalimab-aahu, flush the entire administration tubing with 0.9% Sodium Chloride Injection to ensure all of the medication is administered. Spike the 50mL 0.9% Sodium Chloride Injection bag and administer the flush at the same rate as the infusion of nipocalimab-aahu.

9. Post infusion monitoring: Monitor patient and vital signs periodically during the infusion and 30 minutes after the infusion is complete.

VI. CLINICAL MONITORING

A. Prior to therapy:

1. Assess if patient is up-to-date on vaccinations

2. Confirm patient has no current, active infections

B. During therapy:

1. Monitor for signs and symptoms of infections including temperature. Delay nipocalimab-aahu administration in patients with an active infection until the infection is resolved. If serious infection occurs during treatment with nipocalimab-aahu, administer appropriate treatment and consider withholding nipocalimab-aahu until the infection has resolved.

2. Monitor for signs and symptoms of hypersensitivity reactions- Monitor patients periodically during administration and for 30 minutes thereafter for clinical signs and symptoms of hypersensitivity reactions including rash, angioedema, and dyspnea. If a hypersensitivity reaction occurs during administration, discontinue nipocalimab-aahu infusion and institute appropriate supportive measures if needed.

3. Immunogenicity- As with all monoclonal antibodies, there is a potential for immunogenicity. In clinical trials 49 out of 102 patients developed anti- nipocalimab-aahu antibodies and 19 patients

developed neutralizing antibodies. The available data is too limited to make definitive conclusions on immunogenicity. Patients should be monitored for disease progression and therapy efficacy. In addition, the ordering provider may order periodic labs to check for various antibodies.

4. Monitor disease progression and symptoms of muscle weakness and fatigue including: eyelid drooping, blurred or double vision, difficulty speaking, difficulty chewing or swallowing, choking, difficulty supporting the neck, shortness of breath/difficulty breathing, weakness in arms and legs, and difficulty walking/standing. There are various Myasthenia Gravis scales and questionnaires to measure disease severity and quality of life:

    a. MG-ADL (Myasthenia Gravis Activities of Daily Living): Patient reported outcomes including ability to brush hair and teeth, ability to rise from a chair, diplopia, ptosis, chewing, swallowing, speech problems, and shortness of breath/difficulty breathing. Each item is scored 0-3 with total score ranging from 0-24. The higher the score, the more severe the disease.

    b. QMG (Quantitative Myasthenia Gravis Score): Measures ptosis, diplopia, orbicularis oculi weakness, swallowing a cup of water, speech, percent predicted forced vital capacity, grip strength, arm endurance, leg endurance, and neck flexion endurance. Items are scored 0 to 3 with total scores between 0-39. Higher scores indicate disease severity.

    c. MGC (Myasthenia Gravis Composite): Measures comprehensive severity. This scale measures diplopia, ptosis, facial/neck/deltoid/hip flexor strength, chewing, swallowing, breathing, and speech. Total scores range from 0-50 and higher scores indicate disease severity.

    d. MG-QOL15r- (Myasthenia Gravis Quality of Life 15r)- Patient completed survey with 15 questions. Measures diplopia, eating, speech, mobility, in addition to social activity, hobbies, frustrations, personal independence, and depression. Scores range from 0-2. Total scores range from 0 to 30 and higher scores indicate worse quality of life.

Please refer to the package insert for the most up to date guidance on this medication.

REFERENCES:

Imaavy (nipocalimab-aahu) [package insert]. Horsham, PA: Janssen Biotech, Inc; 2025.

Antozzi C, Guptill J, Bril V, et al. Safety and Efficacy of Nipocalimab in Patients With Generalized Myasthenia Gravis: Results From the Randomized Phase 2 Vivacity-MG Study. Neurology. 2024;102(2):e207937.

United States Pharmacopeia (USP). General Chapter, <797> Pharmaceutical Compounding—Sterile Preparations. (2023) USP-NF. Rockville, MD: United States Pharmacopeia. Accessed November 29, 2023.

APPENDIX A: ANAPHYLAXIS KIT INSTRUCTIONS

Emergency Medication After Your Infusion

Please call your pharmacy if you have any questions or concerns. In the event of an emergency, always call 911.

Your nurse will tell you when you need to use Emergency Medications.
The epinephrine dose will be noted on the Anaphylaxis Protocol included with your kit.

Start with a clean work surface and clean hands.

Open the supply bag labeled Anaphylaxis Kit Contents.

You will need:

1. **Bag containing Pills** (2 Acetaminophen and 2 Diphenhydramine)
2. **Bag containing Alcohol Prep Pads**
3. **Bag labeled IM Epinephrine**

All other contents will not be needed.

Open the IM Epinephrine Bag

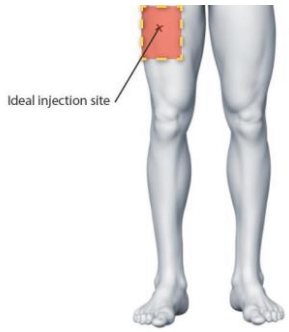
1. **Remove 1 of each item**
    a. 1 -syringe
    b. 1 – brown labeled filter needle (BD Filter Needle)- **for ampule use only**
    c. 1 – black labeled safety needle (Magellan Hypodermic Safety Needle 22G x 1”)
    d. 1 ampule of epinephrine

Prepare IM (intramuscular) injection of Epinephrine:

1. **Attach the brown filtered needle to syringe**
    a. Be careful to not touch the tip of the syringe or the needle.
2. Using an **alcohol swab, wipe the neck of the epinephrine ampule.**
3. Holding the ampule upright, **swirl and flick the ampule until all fluid flows to the bottom chamber** (the top chamber should be empty).
4. Using a new alcohol wipe, grasp the neck of the ampule and with your other hand grasp the bottom chamber of the ampule. **Quickly snap the top of the ampule off, directing the snap away from you.**

5. **Place the tip of the brown filter needle inside the ampule**. Tilting the ampule, **withdraw dose of medication into the syringe** by gently pulling back on the plunger. Be careful to not pull the plunger out of the syringe.
6. Remove the needle from the ampule and h**old the syringe upright** with the needle pointing upward. **Gently tap the side of the syringe to bring any air to the top of the syringe.**
7. **Push the air out of the syringe by gently pushing on the plunger**.
8. Replace the cap on the brown filter needle. Discard remainder in ampule.
9. **Remove the brown filter needle and place the black safety needle onto the syringe.**

Give your IM Epinephrine injection



1. **Grasp your leg muscle at the outer mid-thigh** and **cleanse the area** with a new alcohol wipe.
2. **Push the needle into your leg muscle straight** in at a 90-degree angle.
3. **Inject the medication** by depressing the plunger in a slow and steady motion.
4. **Remove the needle** and wipe the site with the alcohol wipe.
5. May repeat dose every 5 minutes (**maximum 3 doses**) if ordered per protocol.

Take the pills by mouth.

a. 2 – Acetaminophen
b. 2 – Diphenhydramine

Place all trash in the bag the pills came in and take with you when you seek medical care. **Give the bag to the nurse or EMT**, so your doctor will know what medication you already took. They will properly dispose of the syringe and needles.
Call 911 or have someone drive you to the emergency department.

APPENDIX B: EPINEPHRINE KIT INSTRUCTIONS FOR IM INJECTION

Emergency Medication After Your Infusion

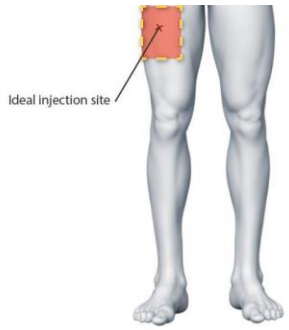
Please call 1-800-755-4704 if you have any questions or concerns. We are available 24 hours a day, 7 days a week. In the event of an emergency, always call 911.
Your nurse will tell you when you need to use Emergency Medications.
Start with a clean work surface and clean hands.
Open the supply bag labeled Epinephrine Kit Contents.

1. **Remove 1 of each item**
    a. 1 -syringe
    b. 1 – brown labeled filter needle (BD Filter Needle)
    c. 1 – black labeled safety needle (Magellan Hypodermic Safety Needle 22G x 1”)
    d. 1 ampule of epinephrine

Prepare IM (intramuscular) injection of Epinephrine:

2. **Attach the brown filtered needle to syringe**
    a. Be careful to not touch the tip of the syringe or the needle.
3. Using an **alcohol swab, wipe the neck of the epinephrine ampule**
4. Holding the ampule upright, **swirl and flick the ampule until all fluid flows to the bottom chamber** (the top chamber should be empty).
5. Using a new alcohol wipe, grasp the neck of the ampule and with your other hand grasp the bottom chamber of the ampule. **Quickly snap the top of the ampule off, directing the snap away from you.**
6. **Place the tip of the brown filter needle inside the ampule**. Tilting the ampule, **withdrawal all the medication into the syringe** by gently pulling back on the plunger. Be careful to not pull the plunger out of the syringe.
7. Remove the needle from the ampule and h**old the syringe upright** with the needle pointing upward. **Gently tap the side of the syringe to bring any air to the top of the syringe.**
8. **Push the air out of the syringe by gently pushing on the plunger**.
9. Replace the cap on the brown filter needle.
10. **Remove the brown filter needle and place the black safety needle onto the syringe.**

Give your IM Epinephrine injection



2. **Grasp your leg muscle at the outer mid-thigh** and **cleanse the area** with a new alcohol wipe.
3. **Push the needle into your leg muscle straight** in at a 90-degree angle.
4. **Inject the medication** by depressing the plunger in a slow and steady motion.
5. **Remove the needle** and wipe the site with the alcohol wipe.

Place all trash in the bag and take it with you when you seek medical care. **Give the bag to the nurse or EMT**, so your doctor will know what medication you already took. They will properly dispose of the syringe and needles.

Call 911 or have someone drive you to the emergency department.