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.

Eptinezumab-jjmr (Vyepti) Clinical Guideline for Home Intravenous Therapy

Section: Clinical Guideline
Compliance: ACHC Infusion Pharmacy
ACHC Standards: n/a
URAC Standards: n/a
Policy ID: CG006
Effective: 1/2/2024
Reviewed:
Revised:
Approved by, Title and Date Approved: Kathleen Patrick, President, 1/2/2024

I. BACKGROUND

Eptinezumab-jjmr is a humanized immunoglobulin G1 (IgG1) monoclonal antibody specific for calcitonin gene-related peptide (CGRP) ligand used for the preventive treatment of migraine in adults. Migraines are associated with activation of trigeminal durovascular nociceptive afferents and release of CGRP. Eptinezumab binds to both isoforms of CGRP and inhibits the interaction between CGRP and its' receptor. Through inhibition of the CGRP ligand, eptinezumab is a preventative treatment for patients with chronic and episodic migraines. Eptinezumab is currently formulated for IV administration every three months. The following outlines the procedures for servicing patients in need of outpatient eptinezumab 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 of eptinezumab in the home will be determined on a case-by-case basis and reviewed by nursing and pharmacy management. Appropriateness of subsequent doses for home administration will be reviewed. Date of prior infusion must be provided, if applicable. The following criteria will be evaluated:
   1. Prescriber preference
   2. Allergy profile
   3. Age ≥ 18 years
   4. Other relevant social and/or medical history

C. Physician orders for eptinezumab must include:
   1. Drug and dose
   2. Route of administration
   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. Baseline labs or tests prior to starting therapy

E. 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 (Appendix A)

III. PHARMACOLOGIC OVERVIEW

Refer to manufacturer's full Prescribing Information for most up to date information

A. Indications: eptinezumab-jjmr is indicated for the preventive treatment of migraine in adults

B. Dosing
   1. 100 mg administered by intravenous infusion every 3 months. Some patients may benefit from a dosage of 300 mg every 3 months.
   2. Dose Adjustment: No renal, hepatic, or age related dose adjustments

C. Duration: Discontinue therapy if treatment is unsuccessful after two treatment cycles (at 6 months after initiation). Maintenance treatment duration has not been defined.

D. Contraindications: Patients with serous hypersensitivity to eptinezumab-jjmr or to any of the excipients.

E. Warnings and Precautions
   1. Hypersensitivity reactions, including angioedema, urticaria, facial flushing, and rash occurred in clinical trials. Most reactions occurred during the infusion, were not serious, but led to discontinuation or required treatment.
   2. Pregnancy and Lactation precautions: There are no adequate data on developmental risks associated with the use of eptinezumab in pregnant women. No adverse developmental effects were observed following administration of eptinezumab-jjmr to pregnant animals at doses greater than those used clinically. In the U.S. general population, the estimated background risk of major birth defects and miscarriages in clinically recognized pregnancies is 2%-4% and 15%-20%, respectively. The estimated rate of major birth defects (2.2%-2.9%) and miscarriage (17%) among deliveries to women with migraine are similar to rates reported in women without migraine. There are no data on the presence of eptinezumab-jjmr in human milk, the effects on the breastfed infant, or the effects on milk production. The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for eptinezumab and any potential adverse effects on the breastfed infant from eptinezumab or from the underlying maternal condition.

F. Pharmacokinetics:
   1. Volume of Distribution: 3.7 L
   2. Metabolism: Eptinezumab is expected to be degraded by proteolytic enzymes into small peptides and amino acids.
   3. Half life: 27 days

G. Adverse Reactions:
    1. Nasopharyngitis (6-8%)
    2. Hypersensitivity reaction (1-2%)
    3. Antibody development (18-20.6%)

H. Drug Interactions: Eptinezumab-jjmr is not metabolized by cytochrome P450 enzymes. No alteration in pharmacokinetics when administered with subcutaneous sumatriptan. 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.

B. **Use in-line or add-on 0.2micron low protein binding filter**

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
        d. IV Pole
        e. IV injection cap
        f. IV administration set (dial-a-flow or gravity) with in-line or add-on 0.22 micron filter
        g. Syringes (5-10mL) and Needles (20Gx1")
        h. Sharps container

B. Prescription items:
    1. Vial(s) of eptinezumab
    2. Sodium chloride 0.9% 100 mL bag
    3. Sodium chloride 0.9% flush bag (provided as 50mL stock bag)

C. How supplied: Eptinezumab-jjmr injection is a sterile, preservative-free, clear to slightly opalescent, colorless to brownish-yellow solution supplied as a carton containing one 100 mg/mL single-dose vial.

D. Storage and handling: Store refrigerated at 2°C to 8°C (36°F to 46°F) in the original carton to protect from light until time of use. Do not freeze. Do not shake. Begin infusion with diluted product within 4 hours of preparation.

E. Compatibility: Stable in normal saline solution. Do not infuse with other agents.

F. Procedures:
1. Explain reasoning for visit and use of eptinezumab-jjmr
2. Don gloves
3. Establish venous access prior to preparing drug product
4. Counsel patient on warnings, precautions, and potential side effects including: hypersensitivity reactions (angioedema, itching, facial flushing, rash), and nasopharyngitis (cold)
5. Remove eptinezumab-jjmr vials from refrigerator and allow to stand to reach room temperature. Inspect eptinezumab-jjmr vials prior to preparation. Do not use if opaque particles, discoloration, or other foreign particles are present.
6. Prepare infusion:
7. Each eptinezumab vial contains 100 mg. Withdraw 100mg/1mL (from 1 vial) or 300mg/3mL (from 3 vials). Inject prescribed dose into 100 mL 0.9% sodium chloride bag.
8. Gently invert the solution to mix completely. Do not shake.
9. Infuse eptinezumab-jjmr over a total of 30 minutes via dial-a-flow or gravity tubing with a **0.2 micron filter**.
10. After the infusion is complete, flush the line with 20 mL of 0.9% sodium chloride.
11. Post infusion monitoring: Monitor patient and vital signs periodically during the infusion and 30 minutes after the infusion is complete per CarePathRx Nursing Best Practice Administration Guidelines.

VI. CLINICAL MONITORING

A. Baseline labs
1. Assess risk versus benefit and counsel on risks for females of child-bearing age

B. During Therapy:
1. Monitor for signs and symptoms of hypersensitivity reactions: Monitor patients periodically during administration and thereafter for clinical signs and symptoms of hypersensitivity reactions including rash, angioedema, and dyspnea. If a hypersensitivity reaction occurs during administration, discontinue eptinezumab-jjmr infusion and institute appropriate supportive measures if needed.
2. Immunogenicity: As with all monoclonal antibodies, there is a potential for immunogenicity. In clinical trials, approximately 20% of patients developed anti-eptinezumab-jjmr antibodies and approximately 40% of those 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.
3. Monitor disease progression and symptoms of migraine including: unilateral, pulsating or throbbing head pain, nausea, vomiting, photophobia, phonophobia, and blurred vision. The clinical trial efficacy endpoint used was monthly migraine days (MMD). MMD should be used to monitor disease progression. The following patient-reported outcome measures were used during clinical trials:
    a. Headache Impact Test (HIT-6): Patient completed survey that consists of 6 questions

regarding headache symptoms and its impact on QoL (i.e., impact on ADLs and mood).

b. SF-36v2: Patient completed survey that consists of 36 questions and measures patient functional health and well-being. It is a non-specific QoL survey that can be used across ages, diseases, and treatment groups.
c. EuroQoL 5-Dimensions 5-Levels: Patient completed survey that measures 5-dimensions (mobility, self-care, usual activities, pain/discomfort, and anxiety/depression). Each dimension has 5 levels that range from no problems to extreme problems.
d. Patient Global Impression of Change: Patient answered single question that measures the patient's impression of their global improvement based on a 7-point scale (1=very much improved and 7=very much worse).

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

REFERENCES

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APPENDIX A: ANAPHYLAXIS KIT INTRUCTIONS

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

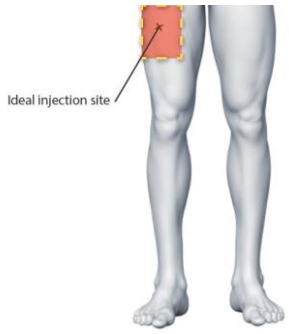
1. **Remove 1 of each item**
    a. 1 -syringe
    b. 1 – brown labeled filter needle (BD Filter Needle)- **for ampule use only**
    c. 1 – black labeled safety needle (Magellan Hypodermic Safety Needle 22G x 1”)
    d. 1 ampule of epinephrine

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 way 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.