

GUIDELINES FOR OUTPATIENT OCRELIZUMAB (OCREVUS) THERAPY

Section: Nursing

Compliance: ACHC Infusion Pharmacy

ACHC Standards: N/A

URAC Standards: N/A

Policy ID: NUR233

Effective: 4/11/22

Reviewed: 5/1/22

Revised:

Approved by: Kathleen Patrick, President, 4/11/22

I. POLICY

Ocrelizumab (Ocrevus) is a monoclonal antibody infusion used for the treatment of relapsing or primary progressive forms of multiple sclerosis. Ocrelizumab binds to CD-20, a cell surface antigen on pre- B and mature B lymphocytes which results in antibody dependent cellular cytolysis and complement-mediated lysis. Maintenance dosing is 600 mg via intravenous (IV) infusion every 6 months.

The following outlines the procedures and protocol for coordination of servicing patients in need of outpatient Ocrelizumab home infusions.

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. Patients must receive the initial 300mg dose in a controlled setting. Appropriateness of other initial or subsequent doses for home administration will be reviewed. Date of prior infusion must be provided.
- C. All patients will require an anaphylaxis kit in the home due to the risk of serious infusion reactions. CarePathRx treatment protocol for anaphylaxis will be instituted unless a more comprehensive patient-specific orders are provided by a physician. See policy NUR012 (Appendix A)
- D. Patients must have a Hepatitis B virus (HBV) screening. Ocrelizumab is contraindicated in patients with active HBV.
- E. Ensure patients are up to date on vaccinations. Administer live or live-attenuated immunizations at least 4 weeks prior to therapy initiation, and non-live vaccines at least 2 weeks prior to therapy initiation.
- F. Physician orders for ocrelizumab will include:

1. Drug and Dose
2. Rate of administration or duration of infusion
3. Order for methylprednisolone IV or equivalent premedication is required
 - a. Additional oral/IV analgesic antipyretic, antihistamine, or other protocol orders may be needed
 - b. Anaphylaxis protocol
 - c. Line care orders

II. PHARMACOLOGIC OVERVIEW

- A. Initial Dosing for Relapsing and Primary Progressive forms of MS: 300 mg IV followed by 300 mg IV two weeks later.
- B. Subsequent Dosing for Relapsing and Primary Progressive forms of MS: Start 6 months after initial dose, give 600 mg IV infusion every 6 months.

Table 1 Recommended Dose, Infusion Rate, and Infusion Duration for RMS and PPMS

		Amount and Volume ¹	Infusion Rate and Duration ³
Initial Dose (two infusions)	Infusion 1	300 mg in 250 mL	<ul style="list-style-type: none"> • Start at 30 mL per hour • Increase by 30 mL per hour every 30 minutes • Maximum: 180 mL per hour • Duration: 2.5 hours or longer
	Infusion 2 (2 weeks later)	300 mg in 250 mL	
Subsequent Doses (one infusion)	One infusion every 6 months ²	600 mg in 500 mL	<ul style="list-style-type: none"> • Start at 40 mL per hour • Increase by 40 mL per hour every 30 minutes • Maximum: 200 mL per hour • Duration: 3.5 hours or longer

- C. For subsequent doses and no previous infusion reactions:
 1. Start infusion rate at 100 mL/hr for the first 15 minutes
 2. Increase to 200 mL/hr for the next 15 minutes
 3. Then increase to 250 mL/hr for the next 30 minutes
 4. Then increase to 300 mL/hr for the final 60 minutes
 5. Duration of 2 hours or longer
- D. Patients MUST be observed for 1 hour post infusions
 1. The package insert recommends administering pre-medications including an antihistamine (diphenhydramine) 30 to 60 minutes prior to each infusion and methylprednisolone 100 mg IV or an equivalent corticosteroid 30 minutes prior to each infusion; consider an antipyretic (acetaminophen)

III. ADMINISTRATIVE GUIDELINES

- A. Patients must receive their first 300 mg infusion in a controlled setting. All patients will require an anaphylaxis kit in the home for subsequent infusions due to the risk of serious infusion reactions. An order for methylprednisolone IV or equivalent as a premedication will also be provided by the dispensing pharmacy
- B. Dosing and Administration: Patients receive Ocrelizumab 600 mg IV every 6 months as a maintenance dose. Maintenance doses will be infused over at least 2 hours if no previous infusion reactions. Otherwise, maintenance doses will be infused over at least 3.5 hours. See dosing guidelines above for titration rates. Administer via pole-mounted ambulatory infusion pump. Home health or field nurses will need to monitor patients and vitals for 1-hour post-infusion.
- C. Compounding:
 - 1. Ocrelizumab will be provided as a home mix. Nurses will need to establish IV access prior to mixing
 - 2. Prior to infusion, bring infusion bag
 - 3. Withdraw 300 mg (10mL) of Ocrelizumab from 1 vial and inject into 250 mL Normal Saline bag.
 - 4. Withdraw 600 mg (20 mL) of Ocrelizumab from 2 vials and inject into 500 mL Normal saline bag. Invert gently to mix. Do not shake
 - 5. Once diluted, Ocrelizumab must be administered within 1 hour of mixing.
 - 6. Infuse via ambulatory infusion pump **with 0.2-micron filter tubing**
- D. Missed dose: Give next dose as soon as possible. Reset the dose schedule to administer the sequential dose 6 months after the missed dose. Doses must be separated by at least 5 months.
- E. Supplies:
 - 1. Alcohol swabs
 - 2. Peripheral IV start kit
 - 3. Peripheral IV catheter (ex. 22 Gauge x1” and 24 Gauge x ¾” for patients needing peripheral access)
 - 4. Ocrelizumab vials
 - 5. 8” extension set
 - 6. IV injection cap
 - 7. Remote reservoir adapter **with 0.2-micron filter**
 - 8. Gloves
 - 9. Tape
 - 10. IV pole
 - 11. Syringes for home mix/ drawing up medication. (20-35 cc) with needles (18-20Gx1”)
 - 12. Ambulatory pump
 - 13. Batteries for ambulatory pump
 - 14. Pump return box

V. CLINICAL MONITORING:

- A. Follow up pharmacy assessment will include:

1. Assessment of signs and symptoms of adverse effects
 2. Update on previous infusion and if patient experienced and infusion reaction. Infusion reactions can include: Pruritis, rash, bronchospasm, throat irritation, oropharyngeal pain, dyspnea, pharyngeal or laryngeal edema, flushing, hypotension, headache, dizziness, nausea, or tachycardia. Inform patients that infusion reactions can occur up to 24 hours after the infusion
 3. Monitor relapse of disease and disability progression.
 4. Prior to every infusion, monitor for any signs/symptoms of infection. Determine whether patient is experiencing an active infection. Delay Ocrelizumab infusion if patient has an active infection, and re-start when infection resolves.
- B. Patients receiving this outpatient regimen will have 24/7 access to nursing and/or pharmacy staff
- C. Ocrelizumab may also cause an increased risk of malignancies including breast cancer. Patients should follow standard cancer screening guidelines.
- D. Women of child-bearing potential should use contraception while receiving Ocrelizumab and for 6 months after the last infusion
- E. Counsel patients to report any new onset of signs of infection and infusion related reactions
- F. Ocrelizumab decreased Immunoglobulin levels and neutrophil counts in clinical trials. Monitor Immunoglobulins levels and CBC as ordered by MD

REFERENCES:

Ocrevus [package insert]. San Francisco, CA. Genentech, Inc; 2017.

Conte WL, Arndt N, Cipriani VP, Dellaria A, Javed A. Reduction in ocrelizumab-induced infusion reactions by a modified premedication protocol. *Multiple Sclerosis and Related Disorders*. 2019;27:397-399.

Mayer L, Kappos L, Racke MK, et al. Ocrelizumab infusion experience in patients with relapsing and primary progressive multiple sclerosis: Results from the phase 3 randomized OPERA I, OPERA II, and ORATORIO studies. *Multiple Sclerosis and Related Disorders*. 2019;30:236-243.

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

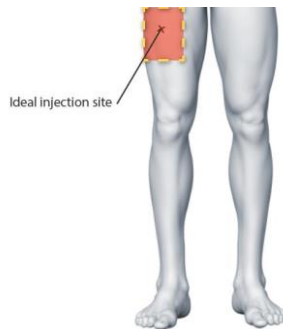
1. Remove 1 of each item
 - a. 1 -syringe
 - b. 1 – brown labeled filter needle (BD Filter Needle)- **for ampul use only**
 - c. 1 – black labeled safety needle (Magellan Hypodermic Safety Needle 22G x 1”)
 - d. 1 ampul of epinephrine

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 ampul.
3. Holding the ampul upright, swirl and flick the ampul 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 ampul and with your other hand grasp the bottom chamber of the ampul. Quickly snap the top of the ampul off, directing the snap way from you.

5. **Place the tip of the brown filter needle inside the ampul.** Tilting the ampul, **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 ampul and **hold 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 ampul.
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.