

# Infusion Protocols

## Ocrelizumab (Ocrevus®)

### **Indication:**

Indicated for the treatment of primary progressive and relapsing forms of multiple sclerosis; the latter to include clinically isolated syndrome, relapsing-remitting disease and active secondary progressive disease, in adults.

### **INITIAL (NEW START) Pre-Infusion Process:**

- 1) Required labs (can be completed up to 8 weeks prior to anticipated infusion appointment):
  - a) CBC with Diff
  - b) Chem 7
  - c) Hepatitis B Core Antibody, Hepatitis B Surface Antibody (LR Anti HBS), Hepatitis B Surface Antigen (HBS AG)
  - d) Hepatitis C (Anti HCV)
  - e) HIV 4<sup>th</sup> Gen
  - f) Immunoglobulins
  - g) LFT
  - h) Quantiferon-TB Gold Plus
  - i) Stratify JCV Ab with Index
  - j) Varicella Zoster IgG
- 2) Complete necessary (VA and CDC recommended) live vaccine immunizations at least 4 weeks prior to infusion.
- 3) No live vaccines at least 4 weeks prior to infusion and no non-live vaccines at least 2 weeks prior to infusion.

### **SUBSEQUENT (MAINTENANCE) Pre-Infusion Process:**

- 1) Required labs (to be completed 2 to 6 weeks prior to infusion appointment):
  - a) CBC with Diff
  - b) Chem 7
  - c) Hepatitis B Core Antibody, Hepatitis B Surface Antibody (LR Anti HBS), Hepatitis B Surface Antigen (HBS AG)
  - d) Immunoglobulins (IgA, IgG, IgM) – to be completed annually
    - i. More frequent monitoring per provider discretion/infection.

- e) LFT
- 2) Assess contraceptive practices and reinforce need for contraception. Pregnancy is contraindicated and if planned, should occur at least six months from last dose.

**Infusion Center Administration of OCRELIZUMAB:**

**Assessment:**

- 1) Check vital signs.
- 2) Assess patient for any active infection. Delay infusion until the infection is resolved.
- 3) Remind female patients to use effective contraception to prevent pregnancy while on OCRELIZUMAB.
- 4) Query patient regarding recent vaccinations:
  - a) Vaccination with live-attenuated or live vaccines is not recommended during treatment and after discontinuation until B-cell repletion.
  - b) Administer all immunizations according to immunization guidelines at least 4 weeks prior to initiation of ocrelizumab for live or live-attenuated vaccines and, whenever possible, at least 2 weeks prior to initiation of ocrelizumab for non-live vaccines.

**Dosing (see Table 1):**

- 1) Initial dose of OCRELIZUMAB is given as two infusions: 300 mg IV on Day 1 and 300 mg IV on Day 15.
- 2) Subsequent dose of OCRELIZUMAB is 600 mg IV once every 6 months thereafter (6 months after Day 1 initial dose).

**Infusion:**

- 1) Obtain VS: Temp, BP, HR, RR, O2 Sat pre-infusion.
- 2) Establish IV access and notify inpatient pharmacy to mix medication.
- 3) Obtain VS: Temp, BP, HR, RR, O2 Sat at start of infusion, with every rate change, until max infusion rate or with any adverse reactions, and then every 30 minutes until 1 hour post-infusion.
- 4) Premedications:
  - a) Methylprednisolone succinate 125 mg IV PUSH x 1 dose 30 minutes prior to start of OCRELIZUMAB.
  - b) Diphenhydramine 25-50 mg IV given approximately 30-60 minutes prior to OCRELIZUMAB.
  - c) Acetaminophen 650 mg po given 30 minutes prior to OCRELIZUMAB.
- 5) Infuse OCRELIZUMAB:
  - a) Diluted OCRELIZUMAB infusion solution should be administered through a dedicated line using an infusion set with a 0.2 or 0.22 micron in-line filter.

- b) Infuse OCRELIZUMAB per entered order in CPRS (infusion rate based on whether initial or subsequent infusion per **Table 1**).
- 6) Monitor patient for  $\geq 1$  hour post-infusion for signs and symptoms of allergy/anaphylaxis.
- 7) Provide patient with information about when to contact clinic and provide after-hours contact information.

**TABLE 1 – Recommended ocrelizumab dose, infusion rate and duration:**

OCRELIZUMAB		Amount and Volume	Infusion Rate and Duration
<b>Initial Dose</b> (given as two infusions – on Day 1 and Day 15)	<b>Day 1</b>	300 mg in 250 mL NS	<ul style="list-style-type: none"> <li>Start at 30 mL/hr</li> <li>Increase by 30 mL/hr every 30 mins</li> <li>Maximum 180 mL/hr</li> <li>Duration: 2.5 hrs or longer</li> </ul>
	<b>Day 15</b>	300 mg in 250 mL NS	
<b>Subsequent Doses</b> (one infusion every 6 months)	<b>Option 1: (“Regular” Infusion Rate)</b>	600 mg in 500 mL NS	<ul style="list-style-type: none"> <li>Start at 40 mL/hr</li> <li>Increase by 40 mL/hr every 30 mins</li> <li>Maximum 200 mL/hr</li> <li>Duration: 3.5 hrs or longer</li> </ul>
	<b>OR</b> <b>Option 2: (“Rapid” Infusion Rate)</b> <i>May use if NO prior serious infusion reactions with any previous OCRELIZUMAB infusion</i>	600 mg in 500 mL NS	<ul style="list-style-type: none"> <li>Start at 100 mL/hr for the first 15 min</li> <li>Increase to 200 mL/hr for the next 15 min</li> <li>Increase to 250 mL/hr for the next 30 min</li> <li>Increase to 300 mL/hr for the remaining 60 min</li> <li>Duration: 2 hrs or longer</li> </ul>

**Management of Infusion Reactions:**

Monitor for signs of reaction. Dose modifications in response to infusion reactions depend on severity.

Mild to Moderate Infusion Reactions	Severe Infusion Reactions	Life-threatening or Disabling Infusion Reactions
Reduce the infusion rate to half the rate of when the reaction began and maintain the reduced rate at least 30 minutes. If tolerated, increase the infusion rate according to the initial infusion schedule (see Table 1).	Interrupt the infusion immediately and provide supportive treatment. Only restart the infusion after all symptoms have resolved, at half the infusion rate of when the reaction began. If tolerated, increase the infusion rate according to the initial infusion schedule (see Table 1).	Immediately stop the infusion and provide appropriate supportive treatment. Permanently discontinue treatment in these patients.

**Post-Infusion Follow Up:**

- 1) Infusion RN team schedules next 6 month infusion appointment and reminds patient to obtain monitoring labs 2 to 6 weeks before this appointment.
- 2) Infusion RN team will instruct patient/assist patient as needed to schedule their follow up with the provider ~ 1 month prior to the next scheduled OCRELIZUMAB infusion.
- 3) Lab orders to be entered by provider per protocol.

**References:**

Centers for Disease Control and Prevention: Recommended Adult Immunization Schedule, United States, 2022, [[www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf](http://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf)].

Farez MF, et al. Practice guideline update summary: Vaccine-preventable infections and immunization in multiple sclerosis: Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology. *Neurology*. 2019 Sep 24;93(13):584-594.

Kroger A, Bahta L, Hunter P. General Best Practice Guidelines for Immunization. Centers for Disease Control and Prevention, [[www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html](http://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html)].

Ocrevus (ocrelizumab) [prescribing information]. South San Francisco, CA: Genentech Inc; March 2021.