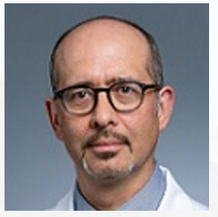
# TRANSITIONING ATYPICAL-HUS PATIENTS FROM ECULIZUMAB TO ULTOMIRIS®

**This perspective comes from interviews with two physicians who have collectively treated or consulted as a second opinion on >50 patients diagnosed with atypical-HUS**



**Jorge Leguizamo, MD**
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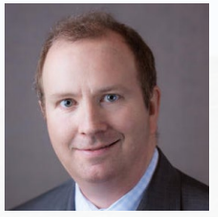

**Patrick Foy, MD**
Medical College of Wisconsin
Milwaukee, WI

Physicians are paid consultants for Alexion and they have been compensated for their time.

## INDICATION

ULTOMIRIS® (ravulizumab-cwvz) injection for intravenous use 300 mg/3 mL vial

ULTOMIRIS is indicated for the treatment of adult and pediatric patients one month of age and older with atypical hemolytic uremic syndrome (aHUS) to inhibit complement-mediated thrombotic microangiopathy (TMA).

Limitation of Use:
ULTOMIRIS is not indicated for the treatment of patients with Shiga toxin E. coli related hemolytic uremic syndrome (STEC-HUS).

## SELECT IMPORTANT SAFETY INFORMATION

**WARNING: SERIOUS MENINGOCOCCAL INFECTIONS**

**ULTOMIRIS, a complement inhibitor, increases the risk of serious infections caused by *Neisseria meningitidis* [*see Warnings and Precautions (5.1)*] Life-threatening and fatal meningococcal infections have occurred in patients treated with complement inhibitors. These infections may become rapidly life-threatening or fatal if not recognized and treated early.**

- **Complete or update vaccination for meningococcal bacteria (for serogroups A, C, W, Y, and B) at least 2 weeks prior to the first dose of ULTOMIRIS, unless the risks of delaying ULTOMIRIS therapy outweigh the risk of developing a serious infection. Comply with the most current Advisory Committee on Immunization Practices (ACIP) recommendations for vaccinations against meningococcal bacteria in patients receiving a complement inhibitor. See *Warnings and Precautions (5.1)* for additional guidance on the management of the risk of serious infections caused by meningococcal bacteria.**
- **Patients receiving ULTOMIRIS are at increased risk for invasive disease caused by *Neisseria meningitidis*, even if they develop antibodies following vaccination. Monitor patients for early signs and symptoms of serious meningococcal infections and evaluate immediately if infection is suspected.**

**Because of the risk of serious meningococcal infections, ULTOMIRIS is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called ULTOMIRIS and SOLIRIS REMS [*see Warnings and Precautions (5.2)*].**

**Please see Important Safety Information throughout and the accompanying full Prescribing Information (UltomirisHCP.com/PI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

## INDICATION

SOLIRIS® (eculizumab) Injection for Intravenous Use 300 mg/30 mL vial

SOLIRIS is indicated for the treatment of patients with atypical hemolytic uremic syndrome (aHUS) to inhibit complement-mediated thrombotic microangiopathy.

Limitation of Use
SOLIRIS is not indicated for the treatment of patients with Shiga toxin E. coli related hemolytic uremic syndrome (STEC-HUS).

## SELECT IMPORTANT SAFETY INFORMATION

**WARNING: SERIOUS MENINGOCOCCAL INFECTIONS**

**SOLIRIS, a complement inhibitor, increases the risk of serious infections caused by *Neisseria meningitidis* [*see Warnings and Precautions (5.1)*]. Life-threatening and fatal meningococcal infections have occurred in patients treated with complement inhibitors. These infections may become rapidly life-threatening or fatal if not recognized and treated early.**

- **Complete or update vaccination for meningococcal bacteria (for serogroups A, C, W, Y, and B) at least 2 weeks prior to the first dose of SOLIRIS, unless the risks of delaying SOLIRIS therapy outweigh the risk of developing a serious infection. Comply with the most current Advisory Committee on Immunization Practices (ACIP) recommendations for vaccinations against meningococcal bacteria in patients receiving a complement inhibitor. *See Warnings and Precautions (5.1)* for additional guidance on the management of the risk of serious infections caused by meningococcal bacteria.**
- **Patients receiving SOLIRIS are at increased risk for invasive disease caused by *Neisseria meningitidis*, even if they develop antibodies following vaccination. Monitor patients for early signs and symptoms of serious meningococcal infections and evaluate immediately if infection is suspected.**

**Because of the risk of serious meningococcal infections, SOLIRIS is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called ULTOMIRIS and SOLIRIS REMS [*see Warnings and Precautions (5.2)*].**

**Please see Important Safety Information throughout and accompanying full Prescribing Information (Solirispro.com/PI) for SOLIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

# TRANSITIONING PATIENTS WITH ATYPICAL-HUS FROM SOLIRIS (ECULIZUMAB) TO ULTOMIRIS

ULTOMIRIS® (ravulizumab-cwvz) injection for intravenous use 300 mg/3 mL vial

## CONSIDERATIONS FOR TRANSITIONING PATIENTS[a]


### Discuss transitioning with the patient and obtain consent (evaluate patient prior to transitioning)

**Educate patients about the safety and efficacy of ULTOMIRIS including the following:**

- ULTOMIRIS has been studied in 4 phase 3 clinical trials with over 500 patients across 2 diseases, including atypical-HUS.
  - ULTOMIRIS provides immediate C5 control sustained for up to 8 weeks in adult patients with atypical-HUS.
    - Starting 2 weeks after the loading dose, ULTOMIRIS is infused every 8 weeks for adult patients and every 4 or 8 weeks for pediatric patients (depending on body weight).
  - The most common adverse reactions in patients with aHUS (incidence ≥20%) were upper respiratory tract infection, diarrhea, nausea, vomiting, headache, hypertension and pyrexia.
  - The majority of side effects with ULTOMIRIS were mild or moderate in intensity in patients with atypical-HUS.
- ULTOMIRIS, built on the foundation of eculizumab, has an ~4x longer half life.[b,c]
- In the maintenance phase, ULTOMIRIS is given every 4 or 8 weeks (depending on body weight), whereas eculizumab is given every 2 weeks.

Nurses are often instrumental in educating patients on ULTOMIRIS. Help ensure that your staff has the appropriate information to be able to teach and counsel patients on what to expect with ULTOMIRIS.

[a]This information is based on live interviews with 2 physicians who have collectively treated or consulted as a second opinion on >50 patients diagnosed with atypical-HUS.
[b]The mean (SD) terminal elimination half-life and clearance of intravenous ULTOMIRIS in patients with atypical-HUS are 51.8 (16.2) days and 0.08 (0.04) L/day, respectively. Half-life of eculizumab is 11.25 to 17.25 days.
[c]Targeted engineering to incorporate 4 amino acid substitutions designed to reduce TMDD and enhance FcRn-mediated recycling of eculizumab led to the generation of ULTOMIRIS, which exhibited an extended duration of action in preclinical models relative to eculizumab.

## SELECT IMPORTANT SAFETY INFORMATION FOR ULTOMIRIS

### CONTRAINDICATIONS

- Initiation in patients with unresolved serious *Neisseria meningitidis* infection.

### WARNINGS AND PRECAUTIONS

**Serious Meningococcal Infections**

ULTOMIRIS, a complement inhibitor, increases a patient's susceptibility to serious, life-threatening, or fatal infections caused by meningococcal bacteria (septicemia and/or meningitis) in any serogroup, including non-groupable strains. Life-threatening and fatal meningococcal infections have occurred in both vaccinated and unvaccinated patients treated with complement inhibitors.

Revaccinate patients in accordance with ACIP recommendations considering the duration of ULTOMIRIS therapy. Note that ACIP recommends an administration schedule in patients receiving complement inhibitors that differs from the administration schedule in the vaccine prescribing information.
If urgent ULTOMIRIS therapy is indicated in a patient who is not up to date with meningococcal vaccines according to ACIP recommendations, provide antibacterial drug prophylaxis and administer meningococcal vaccines as soon as possible.

**Please see Important Safety Information throughout and the accompanying full Prescribing Information (UltomirisHCP.com/PI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

## SELECT IMPORTANT SAFETY INFORMATION FOR SOLIRIS

### CONTRAINDICATIONS

- SOLIRIS is contraindicated for initiation in patients with unresolved serious *Neisseria meningitidis* infection.

### WARNINGS AND PRECAUTIONS

**Serious Meningococcal Infections**

SOLIRIS, a complement inhibitor, increases a patient's susceptibility to serious, life-threatening, or fatal infections caused by meningococcal bacteria (septicemia and/or meningitis) in any serogroup, including non-groupable strains. Life-threatening and fatal meningococcal infections have occurred in both vaccinated and unvaccinated patients treated with complement inhibitors.

Revaccinate patients in accordance with ACIP recommendations considering the duration of therapy with SOLIRIS. Note that ACIP recommends an administration schedule in patients receiving complement inhibitors that differs from the administration schedule in the vaccine prescribing information.
If urgent SOLIRIS therapy is indicated in a patient who is not up to date with meningococcal vaccines according to ACIP recommendations, provide the patient with antibacterial drug prophylaxis and administer meningococcal vaccines as soon as possible.

**Please see additional Important Safety Information throughout and accompanying full Prescribing Information (Solirispro.com/PI) for SOLIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

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(ravulizumab-cwvz)
injection for intravenous use
300 mg/3 mL vial

## CONSIDERATIONS FOR TRANSITIONING PATIENTS[a]

### Discuss transitioning with the patient and obtain consent (evaluate patient prior to transitioning, continued)

**Detail the process**

- For patients switching from eculizumab to ULTOMIRIS, administer the loading dose of ULTOMIRIS at the time of the next scheduled eculizumab infusion, then administer maintenance doses once every 8 weeks or every 4 weeks (depending on body weight), starting 2 weeks after loading dose administration. If an adverse reaction occurs during the administration of ULTOMIRIS, the infusion may be slowed or stopped at the discretion of the physician.

Physicians will monitor patients for at least one hour following completion of the infusion for signs or symptoms of an infusion-related reaction. Depending on each patient's individual circumstance, physicians may potentially need to monitor patients weekly following the first dose of ULTOMIRIS to be sure the patient is comfortable with the new infusion schedule.

- In clinical trials, 5 out of 296 patients treated with ULTOMIRIS experienced infusion-related reactions [lower back pain, drop in blood pressure, elevation in blood pressure, limb discomfort, drug hypersensitivity (allergic reaction), dysgeusia (bad taste), and drowsiness] during ULTOMIRIS administration. These reactions did not require discontinuation of ULTOMIRIS. Interrupt ULTOMIRIS infusion and institute appropriate supportive measures if signs of cardiovascular instability or respiratory compromise occur.

**Ensure patients are vaccinated**

- Vaccinate patients for meningococcal disease according to current ACIP guidelines to reduce the risk of serious infection.
- Provide 2 weeks of antibacterial drug prophylaxis to patients if ULTOMIRIS must be initiated immediately and vaccines are administered less than 2 weeks before starting ULTOMIRIS therapy.

[a]This information is based on live interviews with 2 physicians who have collectively treated or consulted as a second opinion on >50 patients diagnosed with atypical-HUS.

### SELECT IMPORTANT SAFETY INFORMATION FOR ULTOMIRIS

**Serious Meningococcal Infections (continued)**

Various durations and regimens of antibacterial drug prophylaxis have been considered, but the optimal durations and drug regimens for prophylaxis and their efficacy have not been studied in unvaccinated or vaccinated patients receiving complement inhibitors, including ULTOMIRIS. The benefits and risks of treatment with ULTOMIRIS, as well as those associated with antibacterial drug prophylaxis in unvaccinated or vaccinated patients, must be considered against the known risks for serious infections caused by *Neisseria meningitidis*.

Vaccination does not eliminate the risk of serious meningococcal infections, despite development of antibodies following vaccination.

Closely monitor patients for early signs and symptoms of meningococcal infection and evaluate patients immediately if infection is suspected. Inform patients of these signs and symptoms and instruct patients to seek immediate medical care if they occur. Promptly treat known infections. Meningococcal infection may become rapidly life-threatening or fatal if not recognized and treated early. Consider interruption of ULTOMIRIS in patients who are undergoing treatment for serious meningococcal infection depending on the risks of interrupting treatment in the disease being treated.

**Please see Important Safety Information throughout and the accompanying full Prescribing Information (UltomirisHCP.com/PI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

### SELECT IMPORTANT SAFETY INFORMATION FOR SOLIRIS

**Serious Meningococcal Infections (continued)**

Various durations and regimens of antibacterial drug prophylaxis have been considered, but the optimal durations and drug regimens for prophylaxis and their efficacy have not been studied in unvaccinated or vaccinated patients receiving complement inhibitors, including SOLIRIS. The benefits and risks of treatment with SOLIRIS, as well as those associated with antibacterial drug prophylaxis in unvaccinated or vaccinated patients, must be considered against the known risks for serious infections caused by *Neisseria meningitidis*.

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# TRANSITIONING PATIENTS WITH ATYPICAL-HUS FROM SOLIRIS (ECULIZUMAB) TO ULTOMIRIS

ULTOMIRIS®
(ravulizumab-cwvz)
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300 mg/3 mL vial

## CONSIDERATIONS FOR TRANSITIONING PATIENTS[a]

### ☑ Ensure ULTOMIRIS is available and covered by the patient's insurance

Depending on the institution, a pre-certification department or pharmacy team may coordinate with billing/insurance to ensure ULTOMIRIS is available for use in their patients.

### ☑ Vaccinate patient for meningococcal disease according to current ACIP guidelines to reduce the risk of serious infection

Pharmacists may manage the schedule for vaccine boosters to ensure patients are up-to-date with their vaccinations throughout treatment.

### ☑ Set appointment at the time of the next scheduled eculizumab dose to begin the first dose of ULTOMIRIS

With weight-based dosing, both physicians and pharmacists should confirm the appropriate ULTOMIRIS dose and schedule based on body weight.

[a]This information is based on live interviews with 2 physicians who have collectively treated or consulted as a second opinion on >50 patients diagnosed with atypical-HUS.

## SELECT IMPORTANT SAFETY INFORMATION FOR ULTOMIRIS

### ULTOMIRIS and SOLIRIS REMS

Due to the risk of serious meningococcal infections, ULTOMIRIS is available only through a restricted program called ULTOMIRIS and SOLIRIS REMS.

Prescribers must enroll in the REMS, counsel patients about the risk of serious meningococcal infection, provide patients with the REMS educational materials, assess patient vaccination status for meningococcal vaccines (against serogroups A, C, W, Y, and B) and vaccinate if needed according to current ACIP recommendations two weeks prior to the first dose of ULTOMIRIS. Antibacterial drug prophylaxis must be prescribed if treatment must be started urgently, and the patient is not up to date with both meningococcal vaccines according to current ACIP recommendations at least two weeks prior to the first dose of ULTOMIRIS. Patients must receive counseling about the need to receive meningococcal vaccines and to take antibiotics as directed, signs and symptoms of meningococcal infection, and be instructed to carry the Patient Safety Card at all times during and for 8 months following ULTOMIRIS treatment.

Further information is available at www.UltSolREMS.com or 1-888-765-4747.

**Please see Important Safety Information throughout and the accompanying full Prescribing Information (UltomirisHCP.com/PI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

## SELECT IMPORTANT SAFETY INFORMATION FOR SOLIRIS

### ULTOMIRIS and SOLIRIS REMS

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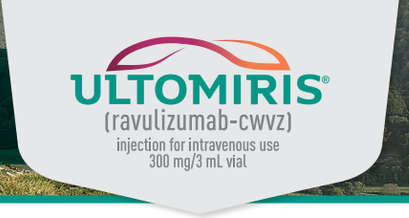
Further information is available at www.UltSolREMS.com or 1-888-765-4747.

### Other Infections

Serious infections with *Neisseria* species (other than *Neisseria meningitidis*), including disseminated gonococcal infections, have been reported.

**Please see additional Important Safety Information throughout and accompanying full Prescribing Information (Solirispro.com/PI) for SOLIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**




**Q:** **Have you had experience with transitioning your atypical-HUS patients from eculizumab to ULTOMIRIS?**

**A:** **Dr. Leguizamo:** I had patients who were on eculizumab for years, and those who were diagnosed closer to the approval, so they had less time on eculizumab. Overall, the time on eculizumab before being transitioned ranges from a few months to years.

**Dr. Foy:** Yes. I had one patient who had around 3 or 4 weekly infusions of eculizumab before I transitioned them.

**Q:** **How have you determined whether a patient is appropriate for transition?**

**A:** **Dr. Leguizamo:** I evaluate every atypical-HUS patient I have on eculizumab for transition to ULTOMIRIS.

**Dr. Foy:** I think a consideration for transitioning is whether the patient has access to ULTOMIRIS.

> **“**
>
> **I evaluate every atypical-HUS patient I have on eculizumab for transition to ULTOMIRIS.**

Physicians are paid consultants for Alexion and they have been compensated for their time. This information is based on live interviews with 2 physicians who have collectively treated or consulted as a second opinion on >50 patients diagnosed with atypical-HUS.

## SELECT IMPORTANT SAFETY INFORMATION FOR ULTOMIRIS

### Other Infections

Serious infections with *Neisseria* species (other than *Neisseria meningitidis*), including disseminated gonococcal infections, have been reported.

ULTOMIRIS blocks terminal complement activation; therefore, patients may have increased susceptibility to infections, especially with encapsulated bacteria, such as infections caused by *Neisseria meningitidis* but also *Streptococcus pneumoniae, Haemophilus influenzae*, and to a lesser extent, *Neisseria gonorrhoeae*. Children treated with ULTOMIRIS may be at increased risk of developing serious infections due to *Streptococcus pneumoniae* and *Haemophilus influenzae* type b (Hib). Administer vaccinations for the prevention of *Streptococcus pneumoniae* and *Haemophilus influenzae* type b (Hib) infections according to ACIP recommendations. Patients receiving ULTOMIRIS are at increased risk for infections due to these organisms, even if they develop antibodies following vaccination.

### Monitoring Disease Manifestations after ULTOMIRIS Discontinuation

ULTOMIRIS treatment of aHUS should be a minimum duration of 6 months. Due to heterogeneous nature of aHUS events and patient-specific risk factors, treatment duration beyond the initial 6 months should be individualized. There are no specific data on ULTOMIRIS discontinuation.

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## SELECT IMPORTANT SAFETY INFORMATION FOR SOLIRIS

### Other Infections (continued)

SOLIRIS blocks terminal complement activation; therefore, patients may have increased susceptibility to infections, especially with encapsulated bacteria, such as infections with *Neisseria meningitidis* but also *Streptococcus pneumoniae, Haemophilus influenzae*, and to a lesser extent, *Neisseria gonorrhoeae*. Additionally, *Aspergillus* infections have occurred in immunocompromised and neutropenic patients. Children treated with SOLIRIS may be at increased risk of developing serious infections due to *Streptococcus pneumoniae* and *Haemophilus influenzae* type b (Hib). Administer vaccinations for the prevention of *Streptococcus pneumoniae* and *Haemophilus influenzae* type b (Hib) infections according to ACIP recommendations. Patients receiving SOLIRIS are at increased risk for infections due to these organisms, even if they develop antibodies following vaccination.

### Monitoring Disease Manifestations After SOLIRIS Discontinuation

After discontinuing SOLIRIS, monitor patients with aHUS for signs and symptoms of thrombotic microangiopathy (TMA) complications for at least 12 weeks. In aHUS clinical trials, 18 patients (5 in the prospective studies) discontinued SOLIRIS treatment. TMA complications occurred following a missed dose in 5 patients, and SOLIRIS was reinitiated in 4 of these 5 patients.

**Please see additional Important Safety Information throughout and accompanying full Prescribing Information (Solirispro.com/PI) for SOLIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

# THE PHYSICIANS TALK: PROCESS


**Q:** How would you describe the transition process from eculizumab?

**A:**

**Dr. Leguizamo:** One thing to keep in mind is that the dosing is based on weight and that there is a 100 mg concentration.

**Dr. Foy:** Transitioning has not been difficult on the logistical end for me. I was worried about insurance problems or that the hospital would say it was too expensive. I have not had these problems.

**Q:** What has been your experience with enrolling in ULTOMIRIS and SOLIRIS REMS program?

**A:**

**Dr. Leguizamo:** You do it once and you are set.

**Dr. Foy:** Enrolling is a straightforward process.

> “Transitioning has not been difficult on the logistical end for me.

Under ULTOMIRIS and SOLIRIS REMS, prescribers must enroll in the program due to the risk of meningococcal infections. Prescribers must counsel patients about the risk of meningococcal infection/sepsis, provide the patients with the REMS educational materials, and ensure patients are vaccinated with meningococcal vaccines or receive 2 weeks of antibacterial drug prophylaxis if treatment must be initiated immediately and vaccines are administered less than 2 weeks before starting ULTOMIRIS.

Physicians are paid consultants for Alexion and they have been compensated for their time. This information is based on live interviews with 2 physicians who have collectively treated or consulted as a second opinion on >50 patients diagnosed with atypical-HUS.

## SELECT IMPORTANT SAFETY INFORMATION FOR ULTOMIRIS

**Monitoring Disease Manifestations after ULTOMIRIS Discontinuation (continued)**

After discontinuing treatment with ULTOMIRIS, patients should be monitored for clinical symptoms and laboratory signs of TMA complications for at least 12 months. TMA complications post-discontinuation can be identified if any of the following is observed: Clinical symptoms of TMA include changes in mental status, seizures, angina, dyspnea, thrombosis or increasing blood pressure. In addition, at least two of the following laboratory signs observed concurrently and results should be confirmed by a second measurement 28 days apart with no interruption: a decrease in platelet count of 25% or more as compared to either baseline or to peak platelet count during ULTOMIRIS treatment; an increase in serum creatinine of 25% or more as compared to baseline or to nadir during ULTOMIRIS treatment; or, an increase in serum LDH of 25% or more as compared to baseline or to nadir during ULTOMIRIS treatment. If TMA complications occur after discontinuation, consider reinitiation of ULTOMIRIS treatment or appropriate organ-specific supportive measures.

**Thromboembolic Event Management**

The effect of withdrawal of anticoagulant therapy during treatment with ULTOMIRIS has not been established. Treatment should not alter anticoagulant management.

**Please see Important Safety Information throughout and the accompanying full Prescribing Information (UltomirisHCP.com/PI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

## SELECT IMPORTANT SAFETY INFORMATION FOR SOLIRIS

**Monitoring Disease Manifestations After SOLIRIS Discontinuation (continued)**

Clinical signs and symptoms of TMA include changes in mental status, seizures, angina, dyspnea, or thrombosis. In addition, the following changes in laboratory parameters may identify a TMA complication: occurrence of 2, or repeated measurement of any one of the following: a decrease in platelet count by 25% or more compared to baseline or the peak platelet count during SOLIRIS treatment; an increase in serum creatinine by 25% or more compared to baseline or nadir during SOLIRIS treatment; or, an increase in serum LDH by 25% or more over baseline or nadir during SOLIRIS treatment.

If TMA complications occur after SOLIRIS discontinuation, consider reinstitution of SOLIRIS treatment, plasma therapy [plasmapheresis, plasma exchange, or fresh frozen plasma infusion (PE/PI)], or appropriate organ-specific supportive measures.

**Thrombosis Prevention and Management**

The effect of withdrawal of anticoagulant therapy during SOLIRIS treatment has not been established. Therefore, treatment with SOLIRIS should not alter anticoagulant management.

**Infusion-Related Reactions**

Administration of SOLIRIS may result in infusion-related reactions, including anaphylaxis or other hypersensitivity reactions. In clinical trials, no patients experienced an infusion-related reaction which required discontinuation of SOLIRIS. Interrupt SOLIRIS infusion and institute appropriate supportive measures if signs of cardiovascular instability or respiratory compromise occur.

**Please see additional Important Safety Information throughout and accompanying full Prescribing Information (Solirispro.com/PI) for SOLIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

# THE PHYSICIANS TALK: PATIENT'S PERSPECTIVE

ULTOMIRIS® (ravulizumab-cwvz) injection for intravenous use 300 mg/3 mL vial

**Q:** **Are there questions your patients and caregivers have raised regarding transitioning?**

**A:** **Dr. Leguizamo:** Everybody seems happy once I explain ULTOMIRIS. This is reassuring to patients. I have not had anyone really concerned.

**Dr. Foy:** There are no head-to-head data between eculizumab and ULTOMIRIS. Some questions are

- How are we going to monitor this?
- How do we know if this is working?
- What is the plan if it does not work?
- Can I go back on eculizumab?
- What happens if I have an AE with ULTOMIRIS?
- What if I have an infusion-related reaction?

**Q:** **What considerations do you have when preparing for a transition?**

**A:** **Dr. Leguizamo:** Keep up with the vaccinations of patients for meningococcal disease according to current ACIP guidelines to reduce the risk of serious infection.

**Dr. Foy:** I have the same conversation with caregivers as with patients. I will monitor the patient closely. Because dosing is every 4 or 8 weeks depending on body weight, you do not see the patient regularly. I make sure they know they can see me sooner if they need to.

> "Everybody seems happy once I explain ULTOMIRIS."

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## SELECT IMPORTANT SAFETY INFORMATION FOR ULTOMIRIS

### Infusion-Related Reactions

Administration of ULTOMIRIS may result in systemic infusion-related reactions, including anaphylaxis and hypersensitivity reactions. In clinical trials, infusion-related reactions occurred in approximately 1 to 7% of patients, including lower back pain, abdominal pain, muscle spasms, drop or elevation in blood pressure, rigors, limb discomfort, drug hypersensitivity (allergic reaction), and dysgeusia (bad taste). These reactions did not require discontinuation of ULTOMIRIS. If signs of cardiovascular instability or respiratory compromise occur, interrupt ULTOMIRIS and institute appropriate supportive measures.

### ADVERSE REACTIONS

Most common adverse reactions in patients with aHUS (incidence ≥20%) were upper respiratory tract infection, diarrhea, nausea, vomiting, headache, hypertension and pyrexia. Serious adverse reactions were reported in 42 (57%) patients with aHUS receiving ULTOMIRIS. The most frequent serious adverse reactions reported in more than 2 patients (2.7%) treated with ULTOMIRIS were hypertension, pneumonia and abdominal pain.

**Please see Important Safety Information throughout and the accompanying full Prescribing Information (UltomirisHCP.com/PI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

## SELECT IMPORTANT SAFETY INFORMATION FOR SOLIRIS

### ADVERSE REACTIONS

The most frequently reported adverse reactions in the aHUS single arm prospective trials (≥20%) were: headache, diarrhea, hypertension, upper respiratory infection, abdominal pain, vomiting, nasopharyngitis, anemia, cough, peripheral edema, nausea, urinary tract infections, pyrexia.

### DRUG INTERACTIONS

Plasmapheresis, Plasma Exchange, or Fresh Frozen Plasma Infusion

Concomitant use of SOLIRIS with plasma exchange (PE), plasmapheresis (PP) or fresh frozen plasma infusion (PE/PI) treatment can reduce serum eculizumab concentrations and requires a supplemental dose of SOLIRIS.

Neonatal Fc Receptor Blockers

Concomitant use of SOLIRIS with neonatal Fc receptor (FcRn) blockers may lower systemic exposures and reduce effectiveness of SOLIRIS. Closely monitor for reduced effectiveness of SOLIRIS.

**To report SUSPECTED ADVERSE REACTIONS contact Alexion Pharmaceuticals, Inc. at 1-844-259-6783 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.**

**Please see Important Safety Information throughout and accompanying full Prescribing Information (Solirispro.com/PI), or scan QR code for SOLIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**

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# ULTOMIRIS: infuse your atypical-HUS patients who are currently on SOLIRIS (eculizumab) treatment with up to 8 weeks of freedom[a]

[a]Starting 2 weeks after the loading dose, maintenance doses are infused every 8 weeks for adult patients and every 4 or 8 weeks for pediatric patients (depending on body weight).

- ☑ Discuss transitioning with the patient and obtain consent (evaluate patient prior to transitioning)
- ☑ Ensure ULTOMIRIS is available and covered by the patient's insurance
- ☑ Vaccinate patient for meningococcal disease according to current ACIP guidelines to reduce the risk of serious infection
- ☑ Set appointment at the time of the next scheduled eculizumab dose to begin the first dose of ULTOMIRIS

## SELECT IMPORTANT SAFETY INFORMATION FOR ULTOMIRIS

### ADVERSE REACTIONS (continued)

Adverse reactions reported in ≥20% of pediatric patients treated with ULTOMIRIS were diarrhea, constipation, vomiting, pyrexia, upper respiratory tract infection, decreased vitamin D, headache, cough, rash, and hypertension.

### DRUG INTERACTIONS

Plasma Exchange, Plasmapheresis, and Intravenous Immunoglobulins

Concomitant use of ULTOMIRIS with plasma exchange (PE), plasmapheresis (PP), or intravenous immunoglobulin (IVIg) treatment can reduce serum ravulizumab concentrations and requires a supplemental dose of ULTOMIRIS.

Neonatal Fc Receptor Blockers

Concomitant use of ULTOMIRIS with neonatal Fc receptor (FcRn) blockers (e.g., efgartigimod) may lower systemic exposures and reduce effectiveness of ULTOMIRIS. Closely monitor for reduced effectiveness of ULTOMIRIS.

### USE IN SPECIFIC POPULATIONS

Pregnancy Exposure Registry

There is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to ULTOMIRIS during pregnancy. Healthcare providers and patients may call 1-833-793-0563 or go to www.UltomirisPregnancyStudy.com to enroll in or to obtain information about the registry.

**To report SUSPECTED ADVERSE REACTIONS, contact Alexion Pharmaceuticals, Inc. at 1-844-259-6783 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.**

**Please see Important Safety Information for ULTOMIRIS throughout and the accompanying full Prescribing Information (UltomirisHCP.com/PI), or scan QR code for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening or fatal meningococcal infections.**



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