

For Nurses

WIDEN THEIR WORLD

INFUSE YOUR PATIENTS WITH ATYPICAL-HUS
WITH UP TO 8 WEEKS OF FREEDOM^{1,a}

^aStarting 2 weeks after the intravenous loading dose, maintenance doses are infused intravenously every 8 weeks for adult patients and every 4 or 8 weeks for pediatric patients (depending on body weight).

Actor portrayal

SELECT IMPORTANT SAFETY INFORMATION

WARNING: SERIOUS MENINGOCOCCAL INFECTIONS

Life-threatening meningococcal infections/sepsis have occurred in patients treated with ULTOMIRIS. Meningococcal infection may become rapidly life-threatening or fatal if not recognized and treated early.

- Comply with the most current Advisory Committee on Immunization Practices (ACIP) recommendations for meningococcal vaccination in patients with complement deficiencies.
- Immunize patients with meningococcal vaccines at least 2 weeks prior to administering the first dose of ULTOMIRIS, unless the risks of delaying ULTOMIRIS therapy outweigh the risk of developing a meningococcal infection. See *Warnings and Precautions* for additional guidance on the management of the risk of meningococcal infection.
- Vaccination reduces, but does not eliminate, the risk of meningococcal infections. Monitor patients for early signs of 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 REMS.

INDICATION

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).

Subcutaneous Use in Adult Patients with aHUS

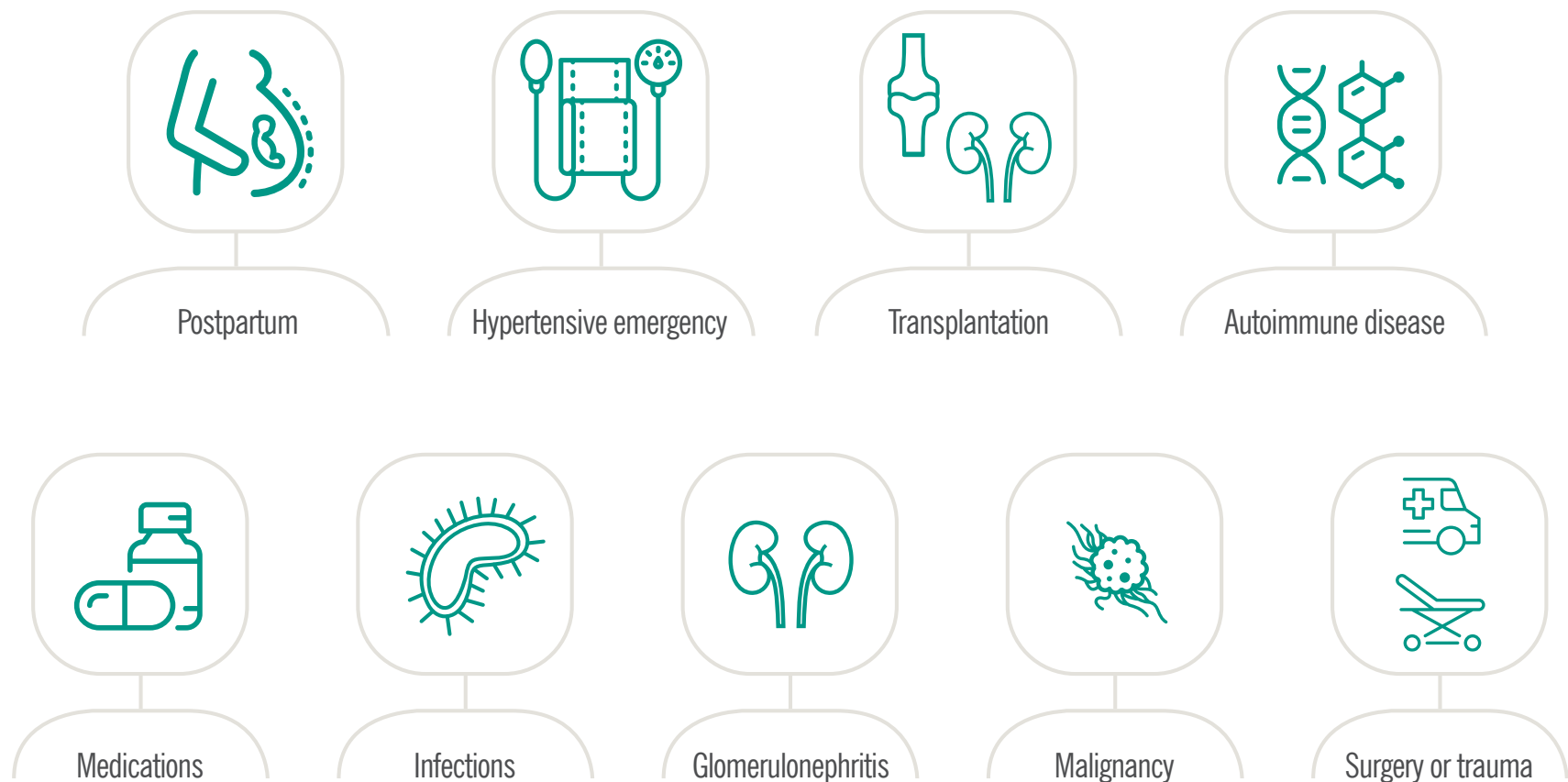
Subcutaneous administration of ULTOMIRIS is not approved for use in pediatric patients.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information \(bit.ly/UltomirisPI\)](https://bit.ly/UltomirisPI) for ULTOMIRIS, including **Boxed WARNING** regarding serious and life-threatening meningococcal infections/sepsis.

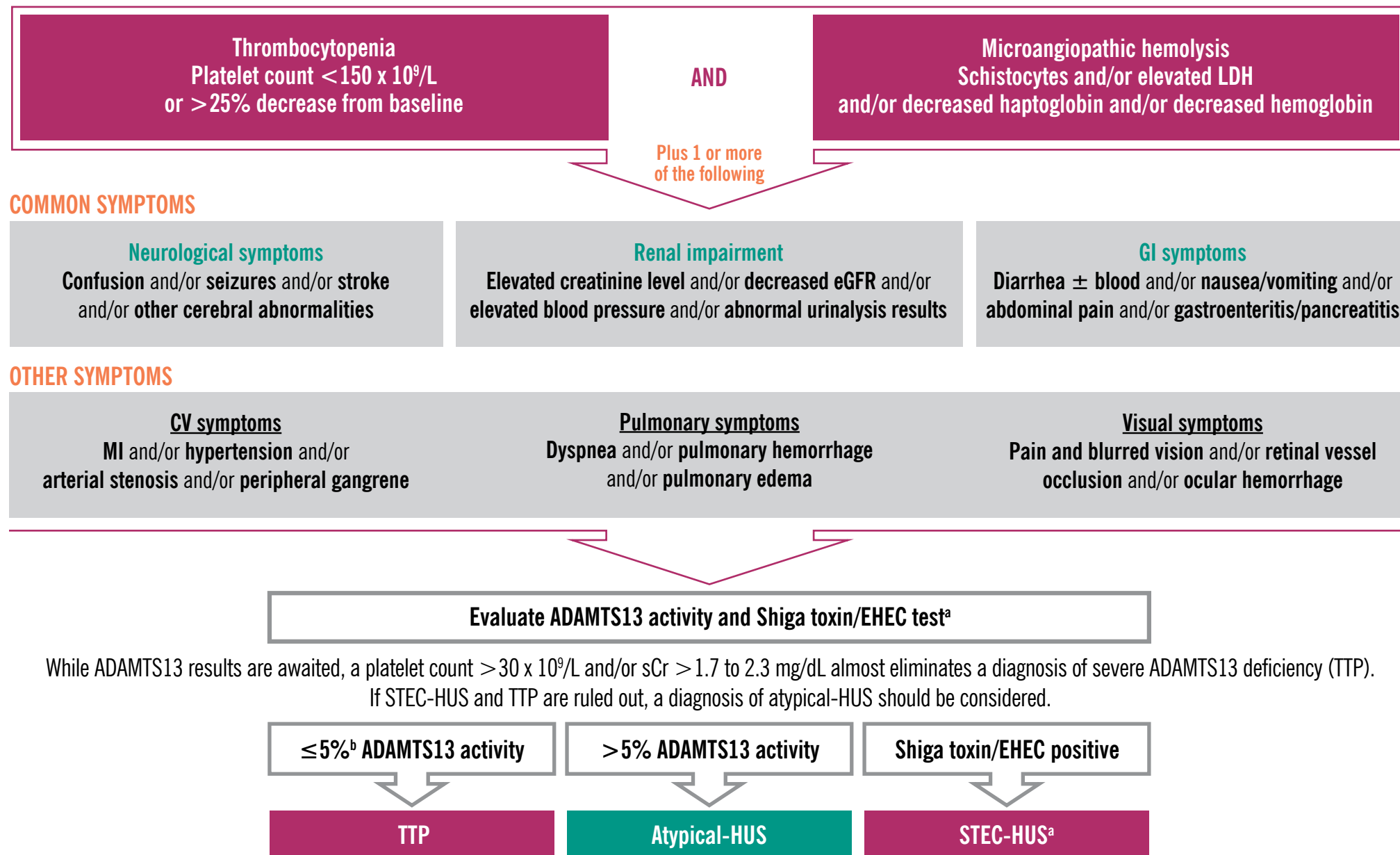
THROMBOTIC MICROANGIOPATHY (TMA) CAN BE ASSOCIATED WITH VARIOUS TRIGGERS²

- Atypical-HUS is a disease caused by dysregulation of the alternative pathway of the complement system, leading to excessive complement activation and TMA^{3,4}
 - Atypical-HUS may be triggered by conditions that activate complement²
 - Persistence of TMA despite treatment of associated conditions may suggest atypical-HUS⁵

Triggers that may accelerate activation of the complement system²



DIFFERENTIAL DIAGNOSIS OF TMA, INCLUDING ATYPICAL-HUS^{2,3,5,6}



^aShiga toxin/EHEC test is warranted with history/presence of gastrointestinal symptoms.

^bRange found in published data is 5%-10%.

ADAMTS13=a disintegrin and metalloproteinase with a thrombospondin type 1 motif member 13; CV=cardiovascular; EHEC=enterohemorrhagic *E coli*; eGFR=estimated glomerular filtration rate; GI=gastrointestinal; LDH=lactate dehydrogenase; MI=myocardial infarction; sCr=serum creatinine; STEC-HUS=Shiga toxin-producing *E coli* hemolytic uremic syndrome; TMA=thrombotic microangiopathy; TTP=thrombotic thrombocytopenic purpura.

ULTOMIRIS WAS ASSESSED IN AN OPEN-LABEL, SINGLE-ARM STUDY OF 56 ADULT PATIENTS WITH ATYPICAL-HUS¹

Adult Study

- The efficacy of ULTOMIRIS was assessed in an open-label, single-arm study of 56 adult patients who displayed signs of TMA and were naive to complement inhibitor therapy prior to study entry¹
- Patients were required to have a platelet count $\leq 150 \times 10^9/L$, evidence of hemolysis such as an elevation in serum LDH, and serum creatinine above the upper limits of normal or required dialysis¹
- Enrollment criteria excluded patients with TMA due to ADAMTS13 deficiency, STEC-HUS, and genetic defect in cobalamin C metabolism¹
- The study consisted of a 26-week initial evaluation period. Mean age at time of first infusion was 42.2 years; 66.1% of patients were female; 51.8% were White, 26.8% were Asian, and 21.4% were unknown or other race¹

Primary end point^{1,7}

- Complete TMA response^a, comprising
 - Platelet count normalization ($\geq 150 \times 10^9/L$)
 - Serum LDH normalization ($\leq 246 U/L$)
 - $\geq 25\%$ improvement in serum creatinine from baseline

Select secondary end points⁷

- Time to complete TMA response
- Complete TMA response status over time
- Dialysis requirement
- CKD stage as evaluated by eGFR
- Hemoglobin response
- Change from baseline in quality of life

Select Demographics and Baseline Characteristics (N=56)^{1,7}



- More than half, 51% (27/53), represented a critically ill population^b
- Mean platelet count was $118.52 \times 10^9/L$
- Mean LDH in serum was 702.38 U/L
- Mean eGFR was 15.86 mL/min/1.73 m²
- 71.4% (40/56) had Stage 5 CKD as assessed by eGFR
- 14% (8/56) had a history of transplant
- 14% (8/56) had evidence of TMA >3 days after childbirth
- 93% (52/56) had extra-renal signs or symptoms of atypical-HUS at baseline

^aPatients had to meet all criteria at 2 separate assessments obtained at least 4 weeks (28 days) apart and any measurement in between.¹

^bPercentage of patients who had received ICU-level care prior to the start of screening based on the total number of patients who had any ER visits or hospitalizations due to atypical-HUS prior to the start of screening.⁷ CKD=chronic kidney disease; eGFR=estimated glomerular filtration rate; ER=emergency room; LDH=lactate dehydrogenase; STEC-HUS=Shiga toxin-producing *E coli* hemolytic uremic syndrome; TMA=thrombotic microangiopathy.

SELECT IMPORTANT SAFETY INFORMATION

CONTRAINDICATIONS

- Patients with unresolved *Neisseria meningitidis* infection.
- Patients who are not currently vaccinated against *Neisseria meningitidis*, unless the risks of delaying ULTOMIRIS treatment outweigh the risks of developing a meningococcal infection.

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

IN A 26-WEEK STUDY, THE MAJORITY OF ADULT PATIENTS TAKING ULTOMIRIS ACHIEVED COMPLETE TMA RESPONSE¹

Adult Study (N=56)¹

Components of Complete TMA Response

84%

(95% CI: 72%-92%)

n=47

Platelet Count
Normalization

77%

(95% CI: 64%-87%)

n=43

LDH Normalization

59%

(95% CI: 45%-72%)

n=33

≥ 25% Improvement in
Serum Creatinine From
Baseline

Hematologic Normalization

73%

(95% CI: 60%-84%)

n=41

Platelet Count
& LDH Normalization

Complete TMA Response

54%

(95% CI: 40%-67%)

n=30

Select secondary end points

- **100% (30/30)** of complete TMA responses were maintained through all available follow-up¹
- 17 of the 29 patients (59%) who required dialysis at study entry discontinued dialysis by the end of available follow-up; 6 of 27 patients who were off dialysis at baseline were on dialysis at last available follow-up¹
- Mean eGFR was 51.8 mL/min/1.73 m² at end of study, a 35.9 mL/min/1.73 m² (227%) mean increase from baseline¹

> 99.5% of all free C5 serum samples in adult patients showed complete inhibition of C5 throughout the 6-month study period^{7,a}

^aAs measured by free C5 serum concentration of <0.5 mcg/mL.¹

C5= complement protein 5; CI=confidence interval; eGFR=estimated glomerular filtration rate; LDH=lactate dehydrogenase; TMA=thrombotic microangiopathy.

SELECT IMPORTANT SAFETY INFORMATION

WARNINGS AND PRECAUTIONS

Serious Meningococcal Infections

Life-threatening meningococcal infections have occurred in patients treated with ULTOMIRIS. The use of ULTOMIRIS increases a patient's susceptibility to serious meningococcal infections (septicemia and/or meningitis). Meningococcal disease due to any serogroup may occur.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information \(bit.ly/UltomirisPI\)](https://bit.ly/UltomirisPI) for ULTOMIRIS, including **Boxed WARNING** regarding serious and life-threatening meningococcal infections/sepsis.


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ULTOMIRIS WAS ASSESSED IN AN OPEN-LABEL, SINGLE-ARM STUDY OF 14 PEDIATRIC PATIENTS WITH ATYPICAL-HUS¹

Pediatric Study

- The efficacy of ULTOMIRIS was assessed in a 26-week ongoing, multicenter, open-label, single-arm study of 14 pediatric patients with documented diagnosis of atypical-HUS who were eculizumab-naïve¹
- Patients were required to have a platelet count $\leq 150 \times 10^9/L$, evidence of hemolysis such as an elevation in serum LDH, and serum creatinine level $\geq 97.5\%$ percentile at screening or required dialysis¹
- Enrollment criteria excluded patients with TMA due to ADAMTS13 deficiency, STEC-HUS, and genetic defect in cobalamin C metabolism¹
- The median age at time of first infusion was 5.2 years; 64.3% of patients were female; 50.0% were White, 28.6% were Asian, 14.3% were Black or African American, 7.1% were American Indian or Alaskan Native, and 7.1% were of unknown race¹

Primary end point^{1,8}

- Complete TMA response^a, comprising
 - Platelet count normalization ($\geq 150 \times 10^9/L$)
 - Serum LDH normalization (less than upper limit of normal)
 - $\geq 25\%$ improvement in serum creatinine from baseline

Select secondary end points⁸

- Time to complete TMA response
- Complete TMA response status over time
- Dialysis requirement
- CKD stage as evaluated by eGFR
- Hemoglobin response
- Change from baseline in quality of life

Select Demographics and Baseline Characteristics (N=14, interim)^{1,8}



Actor portrayal

- Mean platelet count was $60.50 \times 10^9/L$
- Mean LDH in serum was 2324.11 U/L
- Mean eGFR was 28.4 mL/min/1.73 m²
- 35.7% (5/14) of patients had Stage 5 CKD at baseline as assessed by eGFR
- 7% (1/14) had a history of prior kidney transplant
- 71% (10/14) had extra-renal signs or symptoms of atypical-HUS at baseline

^aPatients had to meet all criteria at 2 separate assessments obtained at least 4 weeks (28 days) apart and any measurement in between.¹

ADAMTS13=a disintegrin and metalloproteinase with a thrombospondin type 1 motif member 13; CKD=chronic kidney disease; eGFR=estimated glomerular filtration rate; LDH=lactate dehydrogenase; STEC-HUS=Shiga toxin-producing *E coli* hemolytic uremic syndrome; TMA=thrombotic microangiopathy.

SELECT IMPORTANT SAFETY INFORMATION

Serious Meningococcal Infections (continued)

Vaccinate or revaccinate for meningococcal disease according to the most current ACIP recommendations for patients with complement deficiencies. Immunize patients without history of meningococcal vaccination at least 2 weeks prior to the first dose of ULTOMIRIS.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#)

(bit.ly/UltomirisPI) for ULTOMIRIS, including **Boxed WARNING** regarding serious and life-threatening meningococcal infections/sepsis.

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IN A 26-WEEK STUDY, NEARLY 3 OUT OF 4 PEDIATRIC PATIENTS TAKING ULTOMIRIS ACHIEVED COMPLETE TMA RESPONSE¹

Pediatric Study (N=14, interim)¹

Components of Complete TMA Response

93%

(95% CI: 66%-99%)

n=13

Platelet Count
Normalization

86%

(95% CI: 57%-98%)

n=12

LDH Normalization

79%

(95% CI: 49%-95%)

n=11

≥ 25% Improvement in
Serum Creatinine From
Baseline

Hematologic Normalization

86%

(95% CI: 57%-98%)

n=12

Platelet Count
& LDH Normalization

Complete TMA Response

71%

(95% CI: 42%-92%)

n=10

Select secondary end points

- **100% (10/10)** of complete TMA responses were maintained through all available follow-up¹
- 4 of the 5 patients (80%) who required dialysis at study entry discontinued dialysis after the first month in study and for the duration of ULTOMIRIS treatment; no patient started dialysis during the study¹
- Mean eGFR was 108.0 mL/min/1.73 m² at end of study, a 79.6 mL/min/1.73 m² (280%) mean increase from baseline¹

99.6% of all free C5 serum samples in pediatric patients showed complete inhibition of C5 throughout the 6-month study period^{8,a}

^aAs measured by free C5 serum concentration of <0.5 mcg/mL.¹

C5 = complement protein 5; CI = confidence interval; eGFR = estimated glomerular filtration rate; LDH = lactate dehydrogenase; TMA = thrombotic microangiopathy.

SELECT IMPORTANT SAFETY INFORMATION

Serious Meningococcal Infections (continued)

Patients who initiate ULTOMIRIS treatment less than 2 weeks after receiving meningococcal vaccine(s) must receive appropriate prophylactic antibiotics until 2 weeks after vaccination.

The benefits and risks of antibiotic prophylaxis for prevention of meningococcal infections in patients receiving ULTOMIRIS have not been established. Consider discontinuation of ULTOMIRIS in patients who are undergoing treatment for serious meningococcal infection.

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SAFETY PROFILE OF ULTOMIRIS IN ADULT PATIENTS WITH ATYPICAL-HUS¹

Adverse Reactions Reported in ≥10% of ULTOMIRIS-Treated Adult Patients With Atypical-HUS¹

BODY SYSTEM ADVERSE REACTION	ADULT PATIENTS (N=58)	
	All Grades*** (n=53) n (%)	≥ Grade 3 (n=14) n (%)
Blood and lymphatic system disorders		
Anemia	8 (14)	0 (0)
Gastrointestinal disorders		
Diarrhea	18 (31)	2 (3)
Nausea	15 (26)	2 (3)
Vomiting	15 (26)	2 (3)
Constipation	8 (14)	1 (2)
Abdominal pain	7 (12)	1 (2)
General disorders and administration site conditions		
Pyrexia	11 (19)	1 (2)
Edema peripheral	10 (17)	0 (0)
Fatigue	8 (14)	0 (0)
Infections and infestations		
Upper respiratory tract infection*	15 (26)	0 (0)
Urinary tract infection	10 (17)	5 (9)
Gastrointestinal infection**	8 (14)	2 (3)
Metabolism and nutrition disorders		
Hypokalemia	6 (10)	1 (2)
Musculoskeletal and connective tissue disorders		
Arthralgia	13 (22)	0 (0)
Back pain	7 (12)	1 (2)
Muscle spasms	6 (10)	0 (0)
Pain in extremity	6 (10)	0 (0)
Nervous system disorders		
Headache	23 (40)	1 (2)
Psychiatric disorders		
Anxiety	8 (14)	1 (2)
Respiratory, thoracic, and mediastinal disorders		
Cough	10 (17)	0 (0)
Dyspnea	10 (17)	1 (2)
Skin and subcutaneous tissue disorders		
Alopecia	6 (10)	0 (0)
Dry skin	6 (10)	0 (0)
Vascular disorders		
Hypertension	14 (24)	7 (12)

The most frequent adverse reactions reported in ≥20% of adult patients treated with ULTOMIRIS were upper respiratory tract infection, diarrhea, nausea, vomiting, headache, hypertension, and arthralgia.¹

Clinically relevant adverse reactions in <10% of patients included viral tonsillitis.¹

Serious adverse reactions were reported in 42 (57%) adult and pediatric patients with atypical-HUS 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.¹

Four patients died during the adult atypical-HUS study. Patient deaths were determined by study investigators as unrelated to study drug; the cause of death was sepsis in two patients and intracranial hemorrhage in one patient. The fourth patient, who was excluded from the trial after a diagnosis of STEC-HUS, died due to pretreatment cerebral arterial thrombosis.¹

*Grouped term includes nasopharyngitis, pharyngitis, upper respiratory tract infection, rhinitis, viral upper respiratory tract infection, rhinovirus infection, viral pharyngitis, rhinorrhea, and oropharyngeal pain.

**Grouped term includes gastroenteritis, gastrointestinal infection, enterocolitis infection, infectious colitis, and enterocolitis.

***Graded per CTCAE v5.0.

CTCAE = Common Terminology Criteria for Adverse Events;
STEC-HUS = Shiga toxin-producing *E coli* hemolytic uremic syndrome.



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SAFETY PROFILE OF ULTOMIRIS IN PEDIATRIC PATIENTS WITH ATYPICAL-HUS¹

Adverse Reactions Reported in ≥10% of ULTOMIRIS-Treated Pediatric Patients With Atypical-HUS¹

BODY SYSTEM ADVERSE REACTION	PEDIATRIC PATIENTS (N=16)	
	All Grades** (n=16) n (%)	≥ Grade 3 (n=6) n (%)
Blood and lymphatic system disorders		
Anemia	2 (13)	1 (6)
Lymphadenopathy	2 (13)	0 (0)
Gastrointestinal disorders		
Diarrhea	6 (38)	0 (0)
Constipation	4 (25)	0 (0)
Vomiting	4 (25)	1 (6)
Abdominal pain	3 (19)	0 (0)
Nausea	2 (13)	0 (0)
General disorders and administration site conditions		
Pyrexia	8 (50)	0 (0)
Infections and infestations		
Upper respiratory tract infection*	7 (44)	1 (6)
Gastroenteritis viral	2 (13)	2 (13)
Pneumonia	2 (13)	1 (6)
Tonsillitis	2 (13)	0 (0)
Injury, poisoning and procedural complications		
Contusion	3 (19)	0 (0)
Investigations		
Vitamin D decreased	3 (19)	0 (0)
Metabolism and nutrition disorders		
Decreased appetite	2 (13)	0 (0)
Iron deficiency	2 (13)	0 (0)
Musculoskeletal and connective tissue disorders		
Myalgia	3 (19)	0 (0)
Pain in extremity	2 (13)	0 (0)
Nervous system disorders		
Headache	5 (31)	0 (0)
Respiratory, thoracic, and mediastinal disorders		
Cough	3 (19)	0 (0)
Dyspnea	2 (13)	0 (0)
Skin and subcutaneous tissue disorders		
Rash	3 (19)	0 (0)
Vascular disorders		
Hypertension	4 (25)	1 (6)
Hypotension	2 (13)	0 (0)

The most frequent adverse reactions reported in ≥20% of pediatric patients treated with ULTOMIRIS were upper respiratory tract infection, diarrhea, constipation, vomiting, headache, hypertension, and pyrexia.¹

Clinically relevant adverse reactions in <10% of patients included viral infection.¹

Serious adverse reactions were reported in 42 (57%) adult and pediatric patients with atypical-HUS 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.¹

*Grouped term includes nasopharyngitis, pharyngitis, upper respiratory tract infection, rhinitis, viral upper respiratory tract infection, rhinovirus infection, viral pharyngitis, rhinorrhea, and oropharyngeal pain.

**Graded per CTCAE v5.0.

CTCAE=Common Terminology Criteria for Adverse Events.

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ULTOMIRIS, BUILT ON THE FOUNDATION OF ECULIZUMAB, HAS AN ~4X LONGER HALF-LIFE^{a,b}

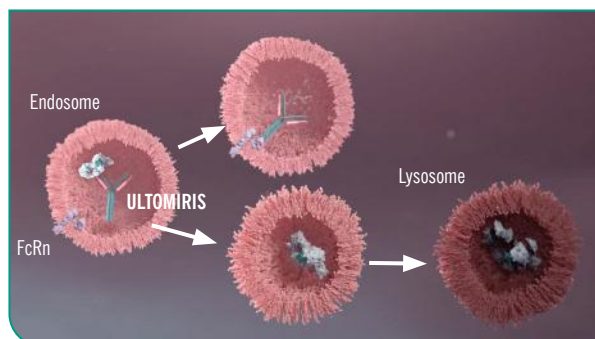
1

Both **ULTOMIRIS** and eculizumab bind to C5 in the bloodstream to prevent its activation.^{1,9}



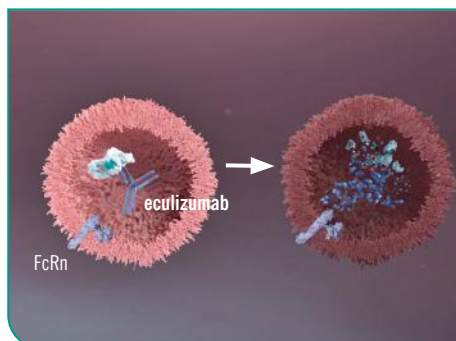
2

ULTOMIRIS is engineered to release C5 in the endosome as pH levels drop and use FcRn to recycle back to the bloodstream, leaving C5 to be degraded by the lysosome.¹⁰



3

ULTOMIRIS has also been engineered to bind to FcRn with greater affinity with a half-life ~4x longer than eculizumab to provide immediate, complete, and sustained inhibition of C5 for up to 8 weeks.^{9,10,c}



ULTOMIRIS differs from eculizumab in how it behaves after binding to C5. For eculizumab, binding to C5 inhibits FcRn-mediated recycling, leading to its lysosomal degradation along with C5.¹⁰

^aThe 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.^{1,9}

^bTargeted 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.¹⁰

^cIn the majority (93%) of adult and pediatric patients with atypical-HUS throughout the entire 26-week treatment period.¹

C5 = complement protein 5; FcRn = neonatal Fc receptor; SD = standard deviation; TMDD = target-mediated drug disposition.

SELECT IMPORTANT SAFETY INFORMATION

ULTOMIRIS REMS

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

Under the ULTOMIRIS REMS, prescribers must enroll in the program. 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.

Additional information on the REMS requirements is available at www.ultomirisrems.com or 1-888-765-4747.

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ULTOMIRIS IS ADMINISTERED ONCE EVERY 4 OR 8 WEEKS, DEPENDING ON BODY WEIGHT¹

THE RECOMMENDED DOSING REGIMEN CONSISTS OF A LOADING DOSE FOLLOWED BY MAINTENANCE DOSES ¹		ULTOMIRIS WEIGHT-BASED DOSING REGIMEN ¹			
ADULT PATIENTS WITH ATYPICAL-HUS	PEDIATRIC PATIENTS ≥ 1 MONTH OF AGE WITH ATYPICAL-HUS WEIGHING ≥ 5 KG	Body Weight Range (kg)	Loading Dose (mg)	Maintenance Dose (mg) and Dosing Interval	
Starting 2 weeks after the initial loading dose, maintenance doses are administered once every 8 weeks	Starting 2 weeks after the initial loading dose, maintenance doses are administered once every 4 or 8 weeks, depending on body weight	≥ 5 to < 10	600	300	Every 4 weeks
		≥ 10 to < 20	600	600	
		≥ 20 to < 30	900	2,100	Every 8 weeks
		≥ 30 to < 40	1,200	2,700	
		≥ 40 to < 60	2,400	3,000	
		≥ 60 to < 100	2,700	3,300	
		100 or greater	3,000	3,600	

For adult and pediatric patients with atypical-HUS transitioning from eculizumab to ULTOMIRIS¹

- Loading dose of ULTOMIRIS should be infused intravenously at the time of the next scheduled eculizumab dose
- Maintenance doses are infused intravenously every 8 weeks for adult patients and every 4 or 8 weeks for pediatric patients (depending on body weight), starting 2 weeks after the intravenous loading dose

Dosing considerations¹

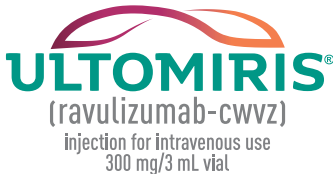
- The dosing schedule is allowed to occasionally vary within 7 days of the scheduled infusion day (except for the first maintenance dose of ULTOMIRIS), but subsequent doses should be administered according to the original schedule

SELECT IMPORTANT SAFETY INFORMATION

Other Infections

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 guidelines. If ULTOMIRIS is administered to patients with active systemic infections, monitor closely for worsening infection.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#) (bit.ly/UltomirisPI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening meningococcal infections/sepsis.





ULTOMIRIS 100 mg/mL IS ADMINISTERED AS A LOADING DOSE FOLLOWED BY MAINTENANCE DOSES¹

ULTOMIRIS 100 mg/mL WEIGHT-BASED DOSING ¹								
	Body weight range ^a (kg)	ULTOMIRIS volume		Volume of 0.9% NaCl ^b		Total volume (dose)	Minimum infusion time (hr)	Maximum infusion rate (mL/hr)
Loading dose administration	5 to <10	6 mL	+	6 mL	=	12 mL (600 mg)	1.4	9
	10 to <20	6 mL	+	6 mL	=	12 mL (600 mg)	0.8	15
	20 to <30	9 mL	+	9 mL	=	18 mL (900 mg)	0.6	30
	30 to <40	12 mL	+	12 mL	=	24 mL (1,200 mg)	0.5	48
	40 to <60	24 mL	+	24 mL	=	48 mL (2,400 mg)	0.8	60
	60 to <100	27 mL	+	27 mL	=	54 mL (2,700 mg)	0.6	90
	100 or greater	30 mL	+	30 mL	=	60 mL (3,000 mg)	0.4	150

^aBody weight at time of treatment.
^bDilute ULTOMIRIS only using 0.9% Sodium Chloride Injection, USP.

SELECT IMPORTANT SAFETY INFORMATION

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. After discontinuing treatment with ULTOMIRIS, patients should be monitored for clinical symptoms and laboratory signs of TMA complications for at least 12 months.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#) (bit.ly/UltomirisPI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening meningococcal infections/sepsis.





ULTOMIRIS 100 mg/mL MAINTENANCE DOSES ARE ADMINISTERED ONCE EVERY 4 OR 8 WEEKS, DEPENDING ON BODY WEIGHT¹

ULTOMIRIS 100 mg/mL WEIGHT-BASED DOSING ¹								
	Body weight range ^a (kg)	ULTOMIRIS volume		Volume of 0.9% NaCl ^b		Total volume (dose)	Minimum infusion time (hr)	Maximum infusion rate (mL/hr)
Maintenance dose administration	5 to <10	3 mL	+	3 mL	=	6 mL (300 mg)	0.8	8
	10 to <20	6 mL	+	6 mL	=	12 mL (600 mg)	0.8	15
	20 to <30	21 mL	+	21 mL	=	42 mL (2,100 mg)	1.3	33
	30 to <40	27 mL	+	27 mL	=	54 mL (2,700 mg)	1.1	50
	40 to <60	30 mL	+	30 mL	=	60 mL (3,000 mg)	0.9	67
	60 to <100	33 mL	+	33 mL	=	66 mL (3,300 mg)	0.7	95
	100 or greater	36 mL	+	36 mL	=	72 mL (3,600 mg)	0.5	144

^aBody weight at time of treatment.
^bDilute ULTOMIRIS only using 0.9% Sodium Chloride Injection, USP.

SELECT IMPORTANT SAFETY INFORMATION

Monitoring Disease Manifestations after ULTOMIRIS Discontinuation (continued)

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.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information \(bit.ly/UltomirisPI\)](https://bit.ly/UltomirisPI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening meningococcal infections/sepsis.





ORDERING ULTOMIRIS 100 mg/mL VIALS FOR PATIENTS WITH ATYPICAL-HUS

The ULTOMIRIS 100 mg/mL formulation comes in 2 single-dose vials, 1,100 mg/11 mL (aqua cap) and 300 mg/3 mL (lavender cap), and is a translucent, clear to yellowish color solution. With ULTOMIRIS 100 mg/mL, there is an optimal vial mix (3 mL and 11 mL) for each patient weight cohort, ensuring there is no product wastage

NUMBER OF VIALS NEEDED FOR ULTOMIRIS WEIGHT-BASED DOSING: 100 mg/mL FORMULATION ¹				
	Body weight range (kg)	ULTOMIRIS volume	ULTOMIRIS vial combinations	
			1,100 mg/11 mL	300 mg/3 mL
Loading dose administration	5 to <10	6 mL		2
	10 to <20	6 mL		2
	20 to <30	9 mL		3
	30 to <40	12 mL		4
	40 to <60	24 mL		8
	60 to <100	27 mL		9
	100 or greater	30 mL		10

100 mg/mL (3 mL vial): J code, J1303; National Drug Code, NDC 25682-025-01

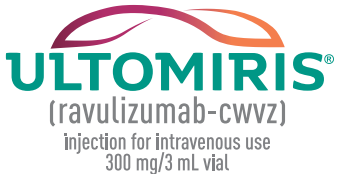
100 mg/mL (11 mL vial): J code, J1303; National Drug Code, NDC 25682-028-01

SELECT IMPORTANT SAFETY INFORMATION

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 additional Important Safety Information throughout and accompanying full [Prescribing Information](#) (bit.ly/UltomirisPI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening meningococcal infections/sepsis.





ORDERING ULTOMIRIS 100 mg/mL VIALS FOR PATIENTS WITH ATYPICAL-HUS (CONTINUED)

NUMBER OF VIALS NEEDED FOR ULTOMIRIS WEIGHT-BASED DOSING: 100 mg/mL FORMULATION ¹				
	Body weight range (kg)	ULTOMIRIS volume	ULTOMIRIS vial combinations	
			1,100 mg/11 mL	300 mg/3 mL
Maintenance dose administration	5 to <10	3 mL		1
	10 to <20	6 mL		2
	20 to <30	21 mL		7
	30 to <40	27 mL		9
	40 to <60	30 mL		10
	60 to <100	33 mL	3	
	100 or greater	36 mL	3	1

100 mg/mL (3 mL vial): J code, J1303; National Drug Code, NDC 25682-025-01

100 mg/mL (11 mL vial): J code, J1303; National Drug Code, NDC 25682-028-01

SELECT IMPORTANT SAFETY INFORMATION

Infusion-Related Reactions

Intravenous or subcutaneous 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% of patients treated with ULTOMIRIS. These events included lower back pain, drop in blood pressure, elevation in blood pressure, limb discomfort, drug hypersensitivity (allergic reaction), dysgeusia (bad taste), and drowsiness. These reactions did not require discontinuation of ULTOMIRIS. If signs of cardiovascular instability or respiratory compromise occur, interrupt ULTOMIRIS infusion and institute appropriate supportive measures.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#) (bit.ly/UltomirisPI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening meningococcal infections/sepsis.





SUPPLEMENTAL DOSE OF ULTOMIRIS

Plasma exchange (PE), plasmapheresis (PP), and intravenous immunoglobulin (IVIg) treatment have been shown to reduce ULTOMIRIS serum levels. A supplemental dose of ULTOMIRIS is required in the setting of PE, PP, or IVIg.¹

SUPPLEMENTAL DOSE OF ULTOMIRIS AFTER PE, PP, or IVIg ¹				
	Body weight range ^a (kg)	Most recent ULTOMIRIS dose (mg)	Supplemental dose (mg) following each PE or PP intervention	Supplemental dose (mg) following completion of an IVIg cycle
Supplemental dose administration	40 to <60	2,400	1,200	600
		3,000	1,500	
	60 to <100	2,700	1,500	600
		3,300	1,800	
	100 or greater	3,000	1,500	600
		3,600	1,800	
Timing of ULTOMIRIS supplemental dose			Within 4 hours following each PE or PP intervention	Within 4 hours following completion of an IVIg cycle

^aBody weight at time of treatment.

SELECT IMPORTANT SAFETY INFORMATION

Injection Site Reactions-Subcutaneous administration

27% (23/84) of patients treated with subcutaneous administration of ULTOMIRIS experienced injection site reactions which included application site rash, device allergy, infusion site pain, infusion site reaction, injection site bruising, injection site erythema, injection site hematoma, injection site induration, injection site inflammation, injection site pain, injection site pruritus, injection site rash, injection site reaction, injection site swelling, injection site urticaria, medical device site bruise, medical device site erythema, medical device site hematoma, medical device site induration, medical device site pruritus, medical device site rash, and medical device site reaction.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#) (bit.ly/UltomirisPI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening meningococcal infections/sepsis.





SUPPLEMENTAL DOSE OF ULTOMIRIS (CONTINUED)

ULTOMIRIS SUPPLEMENTAL DOSE REFERENCE TABLE: 100 mg/mL FORMULATION ¹									
	Body weight range ^a (kg)	Supplemental dose (mg)	ULTOMIRIS volume		Volume of 0.9% NaCl ^b		Total volume	Minimum infusion time (hr)	Maximum infusion rate (mL/hr)
Supplemental dose administration	40 to <60	600	6 mL	+	6 mL	=	12 mL	0.25	48
		1,200	12 mL	+	12 mL	=	24 mL	0.42	57
		1,500	15 mL	+	15 mL	=	30 mL	0.50	60
	60 to <100	600	6 mL	+	6 mL	=	12 mL	0.20	60
		1,500	15 mL	+	15 mL	=	30 mL	0.36	83
		1,800	18 mL	+	18 mL	=	36 mL	0.42	86
	100 or greater	600	6 mL	+	6 mL	=	12 mL	0.17	71
		1,500	15 mL	+	15 mL	=	30 mL	0.25	120
		1,800	18 mL	+	18 mL	=	36 mL	0.28	129

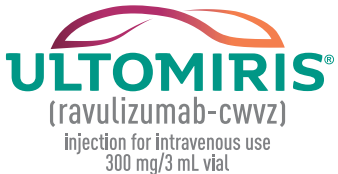
^aBody weight at time of treatment.
^bDilute ULTOMIRIS only using 0.9% Sodium Chloride Injection, USP.

SELECT IMPORTANT SAFETY INFORMATION

Allergies to Acrylic Adhesives

The on-body injector of ULTOMIRIS uses acrylic adhesive. For patients with a known allergy to acrylic adhesive, use of this product may result in an allergic reaction. Premedication can be considered, and supportive measures should be instituted if signs of allergy appear.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#) (bit.ly/UltomirisPI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening meningococcal infections/sepsis.



PREPARING AND ADMINISTERING ULTOMIRIS¹



1. Weigh patient



2. Determine **how many ULTOMIRIS vials are needed based on patient weight and prescribed dose** (see pages 12-15 for reference)

- Vials should be stored under refrigeration at 2°C-8°C (36°F-46°F) in the original carton to protect from light. Do not freeze. Do not shake
- Each vial of ULTOMIRIS is intended for single-dose only



3. Visually inspect each ULTOMIRIS vial to be sure there is no particulate matter or precipitate (if either, do not use)



4. Using aseptic technique, **withdraw the volume of ULTOMIRIS (corresponding to the prescribed dose) from the appropriate number of vials and add to an equal volume (1:1) of 0.9% Sodium Chloride Injection, USP**, in an infusion bag (see pages 12-15 for reference)

- ULTOMIRIS is supplied in two single-dose vials (1,100 mg/11 mL and 300 mg/3 mL) to enable an optimal vial mix for each weight cohort, ensuring there is no product wastage
- ULTOMIRIS requires dilution to a final concentration of 50 mg/mL for the 3 mL and 11 mL vials



5. **Gently mix** the solution by swirling (do not shake or introduce air bubbles) and protect from light

SELECT IMPORTANT SAFETY INFORMATION

ADVERSE REACTIONS

Most common adverse reactions in patients with aHUS (incidence $\geq 20\%$) 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. In clinical studies, clinically relevant adverse reactions in $< 10\%$ of patients include viral tonsillitis in adults and viral infection in pediatric patients and in 3% of adult patients include infusion-related reactions.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#)

18 [\(bit.ly/UltomirisPI\)](https://bit.ly/UltomirisPI) for ULTOMIRIS, including **Boxed WARNING** regarding serious and life-threatening meningococcal infections/sepsis.


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

PREPARING AND ADMINISTERING ULTOMIRIS (CONTINUED)¹



6. Prior to administration, allow the admixture to adjust to room temperature (18°C-25°C, 64°F-77°F). Do not heat the admixture in a microwave or with any heat source other than ambient air temperature



7. Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit



8. Administer the solution immediately to the patient through a **0.2 or 0.22 micron filter**

- If the solution is not administered immediately, the solution can be stored under refrigeration at 2°C-8°C (36°F-46°F) for ≤24 hours, taking into account the expected infusion time. Do not freeze the solution
- When administering stored (refrigerated) solution, be sure to bring to room temperature naturally before administering, and be sure to administer within 4 hours



9. The **length of infusion time will vary** based on the dose as determined by the patient's weight, but the rate of infusion should not exceed the maximum for each dose (see pages 12-15 for reference)



10. **Monitor patient for at least 1 hour following infusion** to ensure no signs or symptoms of an infusion-related reaction occur

- If an adverse reaction occurs during the administration of ULTOMIRIS, the infusion may be slowed or stopped at the discretion of the physician. Interrupt ULTOMIRIS infusion and institute appropriate supportive measures if signs of cardiovascular instability or respiratory compromise occur
- Some signs of infusion-related reaction include lower back pain, drop in blood pressure, elevation in blood pressure, limb discomfort, drug hypersensitivity (allergic reaction), dysgeusia (bad taste), and drowsiness

SELECT IMPORTANT SAFETY INFORMATION

Adverse Reactions for Subcutaneous Administration of ULTOMIRIS

Most common adverse reactions (≥ 10%) with ULTOMIRIS subcutaneous administration via On Body Injector in adult patients with PNH were local injection site reactions, diarrhea, and headache.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#) (bit.ly/UltomirisPI) for ULTOMIRIS, including **Boxed WARNING** regarding serious and life-threatening meningococcal infections/sepsis.



FREQUENTLY ASKED QUESTIONS

What is atypical-HUS?

Atypical-HUS (atypical hemolytic uremic syndrome) is a complex disease of uncontrolled complement activation that causes severe, progressive organ damage or death. Atypical-HUS manifests as TMA in either the presence or absence of an identified trigger.^{11,12}

What is TMA?

TMA (thrombotic microangiopathy) is a disorder characterized by thrombocytopenia, microangiopathic hemolytic anemia, and organ dysfunction in which ischemic organ injury can occur to the brain, kidneys, heart, pancreas, liver, lungs, eyes, and skin.⁵

What is a trigger?

A trigger is a condition that activates the complement system and may unmask atypical-HUS. Triggers can include hypertensive emergency, pregnancy/postpartum, autoimmune disease, infection, medications, and transplant (solid organ/bone marrow). If treatment of the trigger does not resolve the TMA, one should consider a diagnosis of unmasked atypical-HUS.²

How is atypical-HUS diagnosed?

Atypical-HUS is diagnosed following laboratory confirmation of TMA – ie, thrombocytopenia (low platelet count), microangiopathic hemolysis (eg, high LDH), and evidence of organ involvement (often the kidney) – and performing additional tests to exclude other common causes of TMA (disseminated intravascular coagulation [DIC], thrombotic thrombocytopenic purpura [TTP], and Shiga toxin–producing *E. coli* hemolytic uremic syndrome [STEC-HUS]). There is no specific test for atypical-HUS.^{2,3,5}

LDH = lactate dehydrogenase.

What causes atypical-HUS?

Atypical-HUS is a genetic disease caused by a mutation that affects the complement system. The disease can develop at any age and is lifelong.^{3,11}

What are the symptoms of atypical-HUS?

The signs and symptoms of atypical-HUS are varied and may be associated with TMA manifestations: abnormal bleeding, bruising, headaches, blood in urine/stool (signs of thrombocytopenia); fatigue, dark urine, back pain, jaundice, paleness (signs of hemolysis); edema, low urine output, listlessness, confusion, nausea/vomiting, weight loss or weight gain (signs of kidney dysfunction).¹³⁻¹⁶

Who gets atypical-HUS?

Atypical-HUS may be inherited (approximately 20% of cases are familial) or develop sporadically (no family history of the disease).¹¹

What laboratory values are important in atypical-HUS?

Labs that are commonly measured to track the disease include platelet count, LDH (released when red blood cells are destroyed in a hemolytic process), and measures of kidney function including serum creatinine and estimated glomerular filtration rate (eGFR).²

Can atypical-HUS go away?

Atypical-HUS is a lifelong disease, and patients are always at risk of TMA complications.³

SELECT IMPORTANT SAFETY INFORMATION

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.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#) (bit.ly/UltomirisPI) for ULTOMIRIS, including **Boxed WARNING** regarding serious and life-threatening meningococcal infections/sepsis.



FREQUENTLY ASKED QUESTIONS (CONTINUED)

What is ULTOMIRIS?

ULTOMIRIS is a prescription medicine for adult and pediatric patients (≥ 1 month of age) with atypical-HUS. ULTOMIRIS is the first long-acting complement inhibitor approved by the US Food and Drug Administration for atypical-HUS and is dosed once every 4 or 8 weeks, depending on body weight.¹

What do patients need to know before taking ULTOMIRIS?

ULTOMIRIS is a medicine that affects the immune system and can lower the ability of the immune system to fight infections. ULTOMIRIS increases the chance of getting serious and life-threatening meningococcal infections. Patients must receive a meningococcal vaccination at least 2 weeks before their first dose of ULTOMIRIS unless their vaccine is up to date. If urgent treatment with ULTOMIRIS is needed, patients should receive a meningococcal vaccination as soon as possible.¹

How is ULTOMIRIS administered?

ULTOMIRIS is administered through intravenous infusion, starting with a loading dose followed by maintenance doses once every 4 or 8 weeks, depending on body weight. Please refer to pages 18-19 of this brochure for additional information on preparation and administration of ULTOMIRIS.¹

How long is the infusion time for ULTOMIRIS?

ULTOMIRIS has weight-based dosing, and the infusion times vary slightly based on respective weight category. As shown on pages 11-13 of this brochure, minimum infusion times are dependent upon body weight.¹

What is the difference between the dosing and administration for ULTOMIRIS and eculizumab?

ULTOMIRIS can offer extended control of atypical-HUS between infusions and is infused once every 4 or 8 weeks, depending on body weight, vs once every 2 weeks with eculizumab. ULTOMIRIS infusion times vary based on patient weight (see pages 11-13). Eculizumab is usually infused over 35 minutes in adults and 1 to 4 hours in pediatric patients.^{1,9}

What should patients expect after taking ULTOMIRIS?

Results for each atypical-HUS patient taking ULTOMIRIS may be different. After each infusion, patients should be monitored for 1 hour for allergic reactions.¹

How long should patients be maintained on ULTOMIRIS?

ULTOMIRIS treatment of atypical-HUS should be a minimum duration of 6 months. Due to the heterogeneous nature of atypical-HUS events and patient-specific risk factors, treatment duration beyond the initial 6 months should be individualized.¹

Will insurance cover ULTOMIRIS?

Through OneSource™, Alexion Patient Liaisons and Patient Navigators may answer your patients' questions about atypical-HUS, health insurance, financial resources, and community resources available.

SELECT IMPORTANT SAFETY INFORMATION

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.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information](#) (bit.ly/UltomirisPI) for ULTOMIRIS, including **Boxed WARNING** regarding serious and life-threatening meningococcal infections/sepsis.



ALEXION: A LONG-STANDING HISTORY OF COMMITMENT TO SUPPORTING PATIENTS WITH RARE DISEASES

OneSource™ is here to help



Contact OneSource at 1-888-765-4747

Alexion Patient Liaisons and Patient Navigators, with advanced atypical-HUS disease education experience and health insurance information, will be assigned to each patient to provide complimentary education and support.

With 20 years of complement research experience and over a decade of providing complement inhibition in the clinical setting, ALEXION is committed to bringing therapies to patients with rare diseases

For more information on support resources for atypical-HUS, please visit:

• [AlexionOneSource.com](https://www.AlexionOneSource.com) • [ULTOMIRISHCP.com/aHUS](https://www.ULTOMIRISHCP.com/aHUS) • [ULTOMIRISREMS.com](https://www.ULTOMIRISREMS.com)

\$0 out-of-pocket costs for eligible patients^{a,b}

Alexion's support programs connect patients, families, and caregivers facing complement-mediated diseases with a dedicated team of support professionals and advocates.

Copay assistance

- The Alexion OneSource CoPay Program provides financial assistance by covering eligible patients' out-of-pocket medication and infusion costs associated with ULTOMIRIS up to \$15,000 US dollars per calendar year
- Valid only for patients with commercial insurance who have a valid prescription for a US FDA-approved indication of ULTOMIRIS. Not valid for patients covered by government insurance programs^c or other federal or state programs (including any state prescription drug assistance programs)
- Additional requirements may apply. Contact Alexion OneSource for more information on patient eligibility

^aBased on typical commercial patient out-of-pocket deductible limits.

^bAdditional terms and conditions apply. Please contact OneSource with additional questions.

^cIncludes Medicaid, Medicare (including Medicare Part D), Medicare Advantage Plans, Medigap, Veterans Affairs, Department of Defense, or TRICARE. Patients residing in Massachusetts or Rhode Island are eligible for assistance with medication costs but are not eligible for assistance with infusion costs.



Alexion Patient Liaisons and Patient Navigators assist with:



Education

- Providing patients with educational and supporting materials related to atypical-HUS and/or Alexion therapy, such as brochures and website resources
- Safety education regarding Alexion therapy and vaccination support when applicable
- Education and coordination of treatment logistics



Ongoing Support

- Providing personalized support during major life events, such as a change in insurance status, travel, or relocation
- Exploring alternative infusion locations while patients travel, based on patient preference, plan of treatment, and health plan requirements
- Continuing collaboration with designated specialty pharmacy on therapy-related services as applicable



Health Insurance Navigation

- Helping patients understand their health insurance coverage for the Alexion therapy
- Providing information on external funding resources for out-of-pocket costs and exploring alternative options for gaps in coverage and funding issues or concerns
- Supporting patients in locating infusion sites or home infusion options based on patient preference, plan of care, and health plan requirements



Community Connections

- Providing information about in-person and online meetings and events
- Connecting patients with the atypical-HUS community and advocacy groups
- Supporting patients who would like to get involved as patient ambassadors



Alexion Access Navigator

Alexion Access Navigator is a dedicated resource where US healthcare professionals and their offices can find downloadable access and reimbursement materials, including indication-specific coding and billing guides, sample letters of medical necessity, and a link to the REMS program.

[AlexionAccessNavigator.com](https://www.AlexionAccessNavigator.com)

ULTOMIRIS IS THE FIRST AND ONLY LONG-ACTING COMPLEMENT INHIBITOR FOR ATYPICAL-HUS

For adult and pediatric patients one month of age and older with atypical-HUS to inhibit complement-mediated TMA^a



Actor portrayal

- ULTOMIRIS, built on the foundation of eculizumab, has an ~4x longer half-life
- ULTOMIRIS resulted in complete TMA response in the majority of adult (54% [30/56; CI: 40-67%]) and pediatric (71% [10/14; CI: 42-92%]) patients with atypical-HUS by 26 weeks in 2 clinical studies
- Improvements in kidney function, including reduced requirement for dialysis in a majority of adult and pediatric patients requiring dialysis at study entry, were observed in both studies
- ULTOMIRIS is administered based on weight and is infused once every 4 or 8 weeks, depending on body weight, in the maintenance phase

^aNot indicated for STEC-HUS.

CI=confidence interval; defined as 95%; STEC-HUS=Shiga toxin–producing *E coli* hemolytic uremic syndrome; TMA=thrombotic microangiopathy.

The most frequent adverse reactions reported in $\geq 20\%$ of patients treated with ULTOMIRIS were upper respiratory tract infection, diarrhea, nausea, vomiting, headache, hypertension, and pyrexia

References: 1. ULTOMIRIS. Prescribing information. Alexion Pharmaceuticals, Inc. 2. Laurence J. *Clin Adv Hematol Oncol*. 2016;14(11) (suppl 11):2-15. 3. Asif A, et al. *J Nephrol*. 2017;30(3):347-362. 4. Jamme M, et al. *PLoS One*. 2017;12(5):e0177894. 5. Azoulay E, et al. *Chest*. 2017;152(2):424-434. 6. Goodship THJ, et al. *Kidney Int*. 2017;91(3):539-551. 7. Data on file [ALXN1210-aHUS-311CSR]. 8. Data on file [ALXN1210-aHUS-312CSR]. 9. SOLIRIS. Prescribing information. Alexion Pharmaceuticals, Inc. 10. Sheridan D, et al. *PLoS One*. 2018;13(4):e0195909. 11. Noris M, Remuzzi G. *N Engl J Med*. 2009;361(17):1676-1687. 12. Fremeaux-Bacchi V, et al. *Clin J Am Soc Nephrol*. 2013;8(4):554-562. 13. National Heart, Lung, and Blood Institute. Thrombocytopenia. <https://www.nhlbi.nih.gov/health-topics/thrombocytopenia>. Accessed May 20, 2019. 14. Gauer RL, Braun MM. *Am Fam Physician*. 2012;85(6):612-622. 15. Dhaliwal G, et al. *Am Fam Physician*. 2004;69(11):2599-2606. 16. Rahman M, et al. *Am Fam Physician*. 2012;86(7):631-639.

Please see additional Important Safety Information throughout and accompanying full [Prescribing Information \(bit.ly/UltomirisPI\)](https://bit.ly/UltomirisPI) for ULTOMIRIS, including Boxed WARNING regarding serious and life-threatening meningococcal infections/sepsis.

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

SELECT IMPORTANT SAFETY INFORMATION

WARNING: SERIOUS MENINGOCOCCAL INFECTIONS

Life-threatening meningococcal infections/sepsis have occurred in patients treated with ULTOMIRIS. Meningococcal infection may become rapidly life-threatening or fatal if not recognized and treated early.

- Comply with the most current Advisory Committee on Immunization Practices (ACIP) recommendations for meningococcal vaccination in patients with complement deficiencies.
- Immunize patients with meningococcal vaccines at least 2 weeks prior to administering the first dose of ULTOMIRIS, unless the risks of delaying ULTOMIRIS therapy outweigh the risk of developing a meningococcal infection. See *Warnings and Precautions* for additional guidance on the management of the risk of meningococcal infection.
- Vaccination reduces, but does not eliminate, the risk of meningococcal infections. Monitor patients for early signs of 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 REMS.