

Abbreviated Prescribing Information (API)

Please refer to the SmPC for further information before prescribing.

Ultomiris® (ravulizumab) ▼ 300 mg/3 mL and 1,100 mg/11 mL concentrates for solution for infusion. **ATC code:** L04AA43.

Presentations: 3 mL vial containing 300 mg of ravulizumab (100 mg/mL). 11 mL vial containing 1,100 mg of ravulizumab (100 mg/mL). 30 mL vial containing 300 mg of ravulizumab (10 mg/mL). **Indications:** **Paroxysmal Nocturnal Haemoglobinuria (PNH):** Treatment of adult and paediatric patients with a body weight of 10 kg or above with PNH: in patients with haemolysis with clinical symptom(s) indicative of high disease activity; in patients who are clinically stable after having been treated with eculizumab for at least the past 6 months. **Atypical Haemolytic Uremic Syndrome (aHUS):** Treatment of adult and paediatric patients with a body weight of 10 kg or above with aHUS who are complement inhibitor treatment-naïve or have received eculizumab for at least 3 months and have evidence of response to eculizumab. **Generalised Myasthenia Gravis (gMG):** As an add-on to standard therapy for the treatment of adult patients with gMG who are anti-acetylcholine receptor (AChR) antibody-positive. **Neuromyelitis Optica Spectrum Disorder (NMOSD):** Treatment of adult patients with NMOSD who are anti-aquaporin 4 (AQP4) antibody-positive. **Posology and method of administration:**

Posology: *Adult patients with PNH, aHUS, gMG or NMOSD:* Loading dose followed by maintenance dosing, administered by intravenous infusion and based on the patient's body weight. Maintenance doses administered at a once every 8-week interval, starting 2 weeks after loading dose administration. Dosing schedule is allowed to occasionally vary by ± 7 days of the scheduled infusion day (except for the first maintenance dose of ravulizumab) but the subsequent dose should be administered according to the original schedule. Please refer to the SmPC for ravulizumab treatment initiation instructions in patients who are complement-inhibitor treatment-naïve or switching treatment from eculizumab. *Paediatric patients with PNH or aHUS:* Paediatrics with body weight ≥ 40 kg are treated in accordance with the adult dosing recommendations. The weight-based doses and dosing intervals for paediatric patients ≥ 10 kg to 20 kg is once every 4-week interval, for paediatric patients ≥ 20 kg to 40 kg once every 8 weeks, starting 2 weeks after loading dose administration. For patients switching from eculizumab to ravulizumab, the loading dose of ravulizumab should be administered 2 weeks after the last eculizumab infusion, and then maintenance doses should be administered per weight-based dosing regimen shown in SmPC. Ravulizumab has not been studied in paediatric patients < 30 kg. In adult patients with gMG or NMOSD patients, treatment with ravulizumab has only been studied in the setting of chronic administration. Ravulizumab has not been studied in gMG patients with an MGFA Class V. *Supplemental dosing following treatment with plasma exchange (PE), plasmapheresis (PP) and intravenous immunoglobulin (IVIg)* have been shown to reduce ravulizumab serum levels. A supplemental dose of ravulizumab is required in the setting of PE, PP or IVIg. Refer to the SmPC for dosing recommendations. **Special Populations** *Elderly:* No dose adjustment is required for patients with PNH, aHUS, gMG or NMOSD aged 65 years and over. *Renal impairment:* No dose adjustment. *Hepatic impairment:* Not studied, however PK data suggest that no dose adjustment is required in patients with hepatic impairment. *Paediatrics:* The safety and efficacy of ravulizumab in children with a body weight < 10 kg with PNH or aHUS or in children with gMG or NMOSD have not been established. **Method of administration:** Intravenous infusion only (not push or bolus injection). Ultomiris 300 mg/30 mL concentrate for solution for infusion must not be mixed

with Ultomiris 300 mg/3 mL or 1,100 mg/11 mL. Dilute Ultomiris 100 mg/mL (3 mL and 11 mL vials) to a final concentration of 50 mg/mL and administer through a 0.2 μ m filter over a minimal period of 10 to 75 minutes. Dilute Ultomiris 10 mg/mL (30mL vial) to a final concentration of 5 mg/mL and administer through a 0.2 μ m filter over a minimal period of 22 to 194 mins. The infusion time varies according to patient body weight. Please refer to SmPC for further information including instructions on dilution of the product before administration.

Contraindications: Hypersensitivity to the active substance or to any of the excipients. Patients with unresolved *Neisseria meningitidis* infection at treatment initiation; in patients who are not currently vaccinated against *Neisseria meningitidis* unless they receive prophylactic treatment with appropriate antibiotics until 2 weeks after vaccination. **Special warnings and precautions:** **Traceability:** To improve traceability, the batch number of Ultomiris should be recorded. **Serious meningococcal infection:** Due to its mechanism of action, the use of ravulizumab increases the patient's susceptibility to meningococcal infection/sepsis (*N. meningitidis*). Meningococcal disease due to any serogroup may occur. To reduce this risk of infection, all patients must be vaccinated against meningococcal infections at least two weeks prior to initiating ravulizumab unless the risk of delaying ravulizumab therapy outweighs the risk of developing a meningococcal infection. Patients who initiate ravulizumab treatment less than 2 weeks after receiving a meningococcal vaccine, must receive treatment with appropriate prophylactic antibiotics until 2 weeks after vaccination. Vaccines against serogroups A, C, Y, W135 and B where available, are recommended in preventing the commonly pathogenic meningococcal serogroups. Patients must be vaccinated or revaccinated according to current national guidelines for vaccination use. If the patient is being switched from eculizumab treatment, physicians should verify that meningococcal vaccination is current according to national guidelines. Vaccination may not be sufficient to prevent meningococcal infection. Consideration should be given to official guidance on the appropriate use of antibacterial agents. Cases of serious or fatal meningococcal infections/sepsis have been reported in patients treated with ravulizumab and in patients treated with other terminal complement inhibitors. All patients should be monitored for early signs of meningococcal infection and sepsis, evaluated immediately if infection is suspected, and treated with appropriate antibiotics. Patients should be informed of these signs and symptoms and steps should be taken to seek medical care immediately. Physicians should provide patients with a patient information brochure and a patient safety card. **Immunisation** Prior to initiating ravulizumab therapy, it is recommended that patients initiate immunisations according to current immunisation guidelines. Vaccination may further activate complement. As a result, patients with complement-mediated diseases, may experience increased signs and symptoms of their underlying disease. Therefore, patients should be closely monitored for disease symptoms after recommended vaccination. Patients below the age of 18 years old must be vaccinated against *Haemophilus influenzae* and pneumococcal infections. **Other systemic infections:** Ravulizumab therapy should be administered with caution to patients with active systemic infections. Ravulizumab blocks terminal complement activation; therefore, patients may have increased susceptibility to infections caused by *Neisseria* species and encapsulated bacteria. Serious infections with *Neisseria* species (other than *N. meningitidis*), including disseminated gonococcal infections, have been reported. Physicians should advise patients about gonorrhoea prevention. **Infusion-related reactions:** Administration of ravulizumab may result in systemic infusion-related reactions and allergic or hypersensitivity

reactions (including anaphylaxis). In case of systemic infusion-related reaction, if signs of cardiovascular instability or respiratory compromise occur, administration of ravulizumab should be interrupted and appropriate supportive measures should be instituted.

Treatment discontinuation for PNH: If patients with PNH discontinue treatment with ravulizumab, they should be closely monitored for signs and symptoms of serious intravascular haemolysis for at least 16 weeks. **Treatment discontinuation for aHUS:** There are no specific data on ravulizumab discontinuation. If patients must discontinue treatment with ravulizumab, they should be monitored closely for signs and symptoms of TMA on an on-going basis. However, monitoring may be insufficient to predict or prevent severe TMA complications. If TMA complications occur after ravulizumab discontinuation, consider reinitiating ravulizumab treatment beginning with the loading dose and maintenance dose.

Treatment discontinuation for gMG: Patients benefiting from ravulizumab treatment who discontinue treatment should be monitored for symptoms of the underlying disease. If symptoms of gMG occur after discontinuation, consider restarting treatment with ravulizumab. In gMG patients who are not responding to eculizumab approved dosing regimen, treatment with ravulizumab is not recommended. **Treatment discontinuation for NMOSD:** Considering that NMOSD is a chronic disease, patients benefiting from ravulizumab treatment who discontinue treatment should be monitored for symptoms of NMOSD relapse. If symptoms of NMOSD relapse occur after discontinuation, consider restarting treatment with ravulizumab.

Sodium content: *Ultomiris 300 mg/3 mL, 1,100 mg/11 mL:* When diluted with sodium chloride 9 mg/mL (0.9%) solution for injection, Ultomiris contains 0.18 g sodium per 72 mL at the maximal dose, equivalent to 9.1% of the WHO recommended maximum daily intake of 2 g sodium for an adult. *Ultomiris 300 mg/30 mL:* When diluted with sodium chloride (0.9%) solution for injection, Ultomiris contains 2.65 g sodium per 720 mL at the maximal dose, equivalent to 133% of the WHO recommended maximum daily intake of 2 g sodium for an adult **Interaction with other medicinal products and other forms of interaction:** No interaction studies have been performed. Based on the potential inhibitory effect of ravulizumab on complement-dependent cytotoxicity of rituximab, ravulizumab may reduce the expected pharmacodynamic effects of rituximab. **Fertility, pregnancy and lactation:** *Women of childbearing potential:* Should use effective contraception methods during treatment and up to 8 months after treatment. *Pregnancy:* There are no clinical data from the use of ravulizumab in pregnant women. In pregnant women the use of ravulizumab may be considered following an assessment of the risks and benefits. *Breast-feeding:* It is unknown whether ravulizumab is excreted into human milk. Breast-feeding should be discontinued during treatment with ravulizumab and up to 8 months after treatment. *Fertility:* No specific non-clinical study on fertility has been conducted with ravulizumab. **Undesirable effects:** The most common adverse reactions with ravulizumab (IV formulation) are headache (26.6%), nasopharyngitis (17.5%), upper respiratory tract infection (16.8%), diarrhoea (14.2%), pyrexia (12.2%), nausea (12.2%), arthralgia (11.3%), fatigue (11.2%), back pain (10.4%), and abdominal pain (10.1%). The most serious adverse reactions are meningococcal infection (0.6%) including meningococcal sepsis and encephalitis meningococcal. The adverse reactions observed from clinical trials and post-marketing experience are: **Very common (≥1/10):** Upper respiratory tract infection, Nasopharyngitis, Headache, Diarrhoea, Abdominal pain, Nausea, Arthralgia, Back pain, Pyrexia, Fatigue. **Common (≥1/100 to <1/10):** Urinary tract infection, Hypersensitivity,

Dizziness, Vomiting, Dyspepsia, Urticaria, Rash, Pruritus, Myalgia, Muscle spasms, Influenza like illness, Chills, Asthenia, Infusion-related reaction. **Uncommon adverse reactions (≥1/1,000 to <1/100):** Meningococcal infection, Gonococcal infection, Anaphylactic reaction. **Overdose:** Patients who experience overdose should have immediate interruption of their infusion and be closely monitored for any signs or symptoms of adverse reactions and appropriate symptomatic treatment be instituted. **Please refer to the SmPC for further safety information.** **Alexion Local Representative:** Alexion Pharma Nordics AB, Puh/Tel: +46 0 8 557 727 50 **Only for NO:** **Prescription group C. Reimbursement: No. Price (2024-03-06):** 1 vial: 300 mg/3 ml, 65652,80 NOK. 1100 mg/11 ml, 240630,10 NOK.

Only for SE: **Prescription group: Rx. Reimbursement: EF. Only for FI:** Prescription medicine. **Reimbursement: No. Price (2024-03-06):** 1 vial: 300 mg/3 ml, 5722,31 EUR. 1100 mg/11 ml, 20442,30 EUR. **Only for DK:** **Dispensing group: BEGR. Reimbursement: No. MAH:** Alexion Europe SAS, 1-15, 103-105 rue Anatole France, 92300 Levallois-Perret, FRANCE. **Further Information available from:** Alexion Pharmaceuticals e-mail: MedInfo.EMEA@alexion.com

SmPC last revised: 08/2023. **API Ref:** Ultomiris® is a registered trademark of Alexion Pharmaceuticals, Inc. For actual price and detailed information on this medicinal product, please see, www.felleskatalogen.no (NO), www.fass.se (SE), www.pharmacafennica.fi (FI), www.medicinpriser.dk (DK), <http://www.ema.europa.eu> (EU).

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▼ This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Please report any adverse events via your national reporting system. Adverse events can also be reported to Alexion Pharmaceuticals by contacting: <https://contactazmedical.astrazeneca.com/>