Risk Evaluation and Mitigation Strategy (REMS) Document
Soliris (eculizumab) REMS Program

I. Administrative Information

Application Number: BLA 125166
Application Holder: Alexion Pharmaceuticals Inc.
Initial REMS Approval: 06/2010
Most Recent REMS Update: 07/2018

II. REMS Goal(s)

The goals of the REMS are:

• To mitigate the occurrence and morbidity associated with meningococcal infections
• To educate Healthcare Professionals (HCPs) and Patients regarding:
  • the increased risk of meningococcal infections with Soliris
  • the early signs of invasive meningococcal infections, and
  • the need for immediate medical evaluation of signs and symptoms consistent with possible meningococcal infections

III. REMS Requirements

Alexion Pharmaceuticals, Inc. must ensure that healthcare providers, patients, and wholesaler-distributors comply with the following requirements:

1. Healthcare Providers who prescribe Soliris must:

   To become certified to prescribe
   1. Review the drug’s Prescribing Information.
   3. Enroll in the REMS by completing the Prescriber Enrollment Form and submitting it to the REMS Program.
Before treatment initiation at least 2 weeks prior to first dose

4. Assess the patient’s meningococcal vaccine status and immunize patients.

5. Provide the patient with a prescription for a two-week course of antibiotic prophylaxis if Soliris must be started less than 2 weeks after the patient was immunized.


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During treatment

7. Assess the patient for early signs of meningococcal infection and evaluate immediately, if infection is suspected.

8. Discontinue Soliris in patients who are being treated for serious meningococcal infections.

9. Revaccinate patients according to the Advisory Committee on Immunization Practices recommendations.

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At all times

10. Report cases of meningococcal infection, including the patient’s clinical outcomes to Alexion Pharmaceuticals, Inc.

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2. Patients who are prescribed Soliris:

Before treatment initiation, at least 2 weeks prior to the first dose

1. Get meningococcal vaccines as directed by your doctor.

2. Take antibiotics as directed by your doctor for two weeks after you get your vaccine if you have to start Soliris right away.

4. Get meningococcal vaccines as directed by your doctor.

During Treatment

5. Inform the prescriber or get emergency medical care right away if you experience headache with nausea or vomiting; headache and a fever; headache with a stiff neck or stiff back; fever; fever and a rash; confusion; muscle aches with flu-like symptoms; eyes sensitive to light.

6. Have the Patient Safety Card with you.

At all times

Alexion Pharmaceuticals, Inc. must provide training to healthcare providers who prescribe Soliris.

The training includes the following educational material(s): Prescriber Enrollment Form, Prescriber Safety Brochure, Patient Safety Brochure, and Patient Safety Card. The training must be available online or in hardcopy format via mail.

To support REMS Program operations, Alexion Pharmaceuticals, Inc. must:

1. Establish and maintain a REMS Program website, www.solirisrems.com. The REMS program website must include the capability to complete the prescriber certification or enrollment online, and the option to print the PI and REMS materials. All product websites for consumers and healthcare providers must include prominent REMS-specific links to the REMS program website. The REMS program website must not link back to the promotional product website(s).

2. Make the REMS Program website fully operational and all REMS materials available through the website and call center by 30 calendar days of REMS modification (07/25/2018).

3. Establish and maintain a REMS Program call center for REMS participants at 1-888-765-4747.

4. Establish and maintain a validated, secure database of all REMS participants who are certified in the Soliris REMS Program.

5. Ensure prescribers are able to enroll by fax, mail, email, and online.


Reference ID: 4296864
7. Provide Prescriber Enrollment Form, Prescriber Safety Brochure, Patient Safety Brochure, and Patient Safety Card, and the Prescribing Information to health care providers who (1) attempt to prescribe and are not yet certified or (2) inquire about how to become certified.

To ensure REMS participants’ compliance with the REMS Program, Alexion Pharmaceuticals, Inc. must:

8. Maintain adequate records to demonstrate that REMS requirements have been met, including, but not limited to records of: Soliris distribution and dispensing and certification of prescribers. These records must be readily available for FDA inspections.

9. Establish a plan for addressing noncompliance with REMS Program requirements.

10. Monitor prescribers on an ongoing basis to ensure the requirements of the REMS are being met. Take corrective action if non-compliance is identified including de-certification.

IV. REMS Assessment Timetable

Alexion Pharmaceuticals, Inc. must submit REMS assessments every two years beginning June 1, 2015. To facilitate inclusion of as much information as possible while allowing reasonable time to prepare the submission, the reporting interval covered by each assessment should conclude no earlier than 60 calendar days before the submission date for that assessment. Alexion Pharmaceuticals, Inc. must submit each assessment so that it will be received by the FDA on or before the due date.

V. REMS Materials

The following materials are part of the Soliris REMS:

Enrollment Forms:
Prescriber:
    1. Prescriber Enrollment Form

Training and Educational Materials
Prescriber:
    2. Prescriber Safety Brochure
Patient:
    3. Patient Safety Card
    4. Patient Safety Brochure

Other Materials
    5. Soliris REMS Program Website
Soliris is only available through a restricted program called the SOLIRIS REMS (Risk Evaluation and Mitigation Strategy). All prescribers must be specially certified. To become certified, prescribers must:

1) **Review** the SOLIRIS Prescribing Information, Prescriber Safety Brochure, Patient Safety Brochure and the Patient Safety Card.

2) **Enroll** in the SOLIRIS REMS by completing this form.

3) **Counsel** patients and provide them with the Patient Safety Brochure and Patient Safety Card.

There are 2 pages to this form. Complete page 1. Read the agreements and sign page 2. Return BOTH pages to Soliris REMS.

You may complete this form
- online at [www.solirisrems.com](http://www.solirisrems.com)
- by fax at 1-877-580-2596 (ALXN)
- by scanning and emailing to REMS@alexion.com
- by mailing to Alexion Pharmaceutical, Inc. ATTN: REMS Program, 121 Seaport Boulevard, Boston, MA 02210

**Prescriber Information: (please print)**

First Name: _______________________ MI: ____ Last Name: _______________________

Prescriber NPI #: __________________________

Office Address: __________________________________________________________________

City: ___________________________ State: _________ ZIP: _______________

Phone number: __________________________ Fax: __________________________

Email: ______________________________________________________________________________

Continue to page 2 to read the agreement and sign the form. You must return BOTH sides of this form.

Reference ID: 4296864
By completing, signing and submitting this form, I acknowledge and agree that:

- I have read and understand the SOLIRIS Prescribing Information (PI), Prescriber Safety Brochure, Patient Safety Brochure, and the Patient Safety Card.

- I understand the:
  - risk of meningococcal infections associated with SOLIRIS.
  - early signs of meningococcal infections
  - need for immediate medical evaluation of signs and symptoms with possible meningococcal infections

- Before treatment initiation at least 2 weeks prior to the first dose, I will:
  - Assess the patient’s meningococcal vaccine status and immunize patients unless the risks of delaying Soliris therapy outweigh the risks of developing meningococcal infection.
  - Provide the patient with a prescription for a two-week course of antibiotic prophylaxis if Soliris must be started right away.
  - Counsel the patient about the signs and symptoms of meningococcal infections using the Patient Safety Card, and Patient Safety Brochure. Provide a copy of these materials to the patient. Instruct the patient to carry the Patient Safety Card at all times.

- During treatment, I will:
  - Assess the patient for early signs of meningococcal infection and evaluate immediately if infection is suspected.
  - Discontinue SOLIRIS in patients who are being treated for serious meningococcal infections.
  - Revaccinate patients according to the Advisory Committee on Immunization Practices recommendations.

- I will report cases of meningococcal infection including the patient’s clinical outcomes to Alexion Pharmaceuticals, Inc.

- I understand that if I do not maintain compliance with the requirements of the SOLIRIS REMS, I will no longer be able to prescribe SOLIRIS.

- I understand that SOLIRIS REMS and its agents or contractors may contact me to support the administration of the SOLIRIS REMS.

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Prescriber Signature ______________________ Date ______________________

Print Name ______________________

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This brochure provides information on:

- The risk of meningococcal infection
- Patient meningococcal vaccination recommendations
- Monitoring Patients
- Counseling and providing your patients with a Patient Safety Brochure and Patient Safety Card
Risk of Serious Meningococcal Infections
• Life-threatening and fatal meningococcal infections have occurred in patients treated with Soliris. Meningococcal infection may become rapidly life-threatening or fatal if not recognized and treated early.
• Soliris is associated with an approximate 2,000-fold increased risk of meningococcal disease in comparison to the general U.S. population annual rate (0.14 per 100,000 population in 2015).

Immunization
• Immunize all patients with meningococcal vaccines at least 2 weeks prior to administering the first dose of Soliris, unless the risks of delaying Soliris therapy outweigh the risks of developing a meningococcal infection.
• Provide 2 weeks of antibacterial drug prophylaxis to patients if Soliris must be initiated immediately and vaccines are administered less than 2 weeks before starting Soliris therapy.
• Do not initiate Soliris therapy in patients with unresolved serious Neisseria meningitidis infection or who are not currently vaccinated, unless the risks of delaying Soliris treatment outweigh the risk of developing a meningococcal infection.
• If urgent Soliris therapy is indicated in an unvaccinated patient, administer meningococcal vaccine(s) as soon as possible.
• Vaccination reduces, but does not eliminate, the risk of meningococcal infections.
• Comply with the most current Advisory Committee on Immunization Practices (ACIP) recommendations for meningococcal vaccination in patients with complement deficiencies. Revaccinate patients in accordance with ACIP recommendation, considering the duration of Soliris therapy.

Monitoring Patients
• Monitor patients for early signs of meningococcal infections, and evaluate immediately if infection is suspected.
• Discontinue Soliris in patients who are being treated for serious meningococcal infections.

Patient Counseling
Counsel and provide your patients with both the Patient Safety Brochure and Patient Safety Card.
• Tell your patients about the risk of meningococcal infections and that this risk may continue for several weeks after the last dose of Soliris.
• Instruct your patients to seek immediate medical attention if they develop any of the following symptoms:
  - Headache with nausea or vomiting
  - Headache with a stiff neck or stiff back
  - Fever and rash
  - Muscle aches with flu-like symptoms
  - Headache and a fever
  - Fever
  - Confusion
  - Eyes sensitive to light

Patient Safety Card
The card has important safety guidance for both patients and any healthcare provider that may see or treat your patient for medical care.

• Discuss the importance and the proper use of this safety card with every patient.
• Tell your patients to carry this card at all times.
• Instruct patients to show the card to any healthcare professional involved in their care.

Soliris REMS (Risk Evaluation and Mitigation Strategy)
A REMS is a program required by the FDA to manage known or potential serious risk associated with a drug program. Soliris is available only through a restricted program under a REMS. Healthcare providers who prescribe Soliris must be specially certified. Certification consists of review of REMS education materials and enrollment in the Soliris REMS program.
Visit www.solirisREMS.com or call 1-888-SOLIRIS (765-4747) to learn more about the Soliris REMS. Enrollment can also be completed online at www.solirisrems.com

Indication and Usage
Soliris is indicated for the treatment of patients with paroxysmal nocturnal hemoglobinuria (PNH) to reduce hemolysis.
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).
The treatment of adult patients with generalized Myasthenia Gravis (gMG) who are anti-Acetylcholine Receptor (AChR) antibody positive.
Soliris can lower the ability of your immune system to fight infections, **especially meningococcal infection, which requires immediate medical attention**. If you experience any of the following symptoms, you should immediately call your doctor or seek emergency medical care, preferably in a major emergency medical care center:

- headache with nausea or vomiting
- headache and a fever
- headache with a stiff neck or stiff back
- fever
- fever and a rash
- confusion
- muscle aches with flu-like symptoms
- eyes sensitive to light

Get emergency medical care right away if you have any of these signs or symptoms and show this card.

Keep this card with you at all times, even if you stop using Soliris. Your risk of meningococcal infection may continue for several weeks after your last dose of Soliris.

Reference ID: 4296864
This patient has been prescribed Soliris® (eculizumab) therapy, which increases the patient’s susceptibility to meningococcal infection (*Neisseria meningitides*) or other general infections.

- Meningococcal infections may become rapidly life-threatening or fatal if not recognized and treated early

- **Evaluate immediately if infection is suspected and treat with appropriate antibiotics if necessary**

- Contact prescribing physician (below) as soon as possible

For more information about Soliris, please refer to the full Prescribing Information. In case of safety concerns, call **1.888.SOLIRIS (1.888.765.4747)**. In case of adverse event experiences, call **1.844.259.6783**.

Patients receiving Soliris should carry this card at all times. Show this card to any doctor involved in your health care.

Patient Name  

Prescriber Name

Prescriber Number
The purpose of the SOLIRIS REMS is to mitigate the occurrence and morbidity associated with meningococcal infections by informing healthcare providers and patients about:

- Increased risk of meningococcal infections with Soliris
- Early signs of invasive meningococcal infections, and
- Need for immediate medical evaluation of signs and symptoms consistent with possible meningococcal infections.

Soliris is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS). HCPs who prescribe Soliris must be specifically certified. Certification consists of review of REMS educational materials and enrollment in the SOLIRIS REMS.

Healthcare Provider Certification

Certification in the SOLIRIS REMS includes the following steps:

1. Review the SOLIRIS REMS HCP Educational Materials:
   - Prescribing Information
   - Prescriber Safety Brochure
   - Patient Safety Brochure
   - Soliris Patient Safety Card

2. Enroll in the SOLIRIS REMS Program:
   - Click here to complete the SOLIRIS REMS Prescriber Enrollment online.
   - OR
   - Print and sign the Prescriber Enrollment Form.
   - Mail the form to Soliris REMS, Alexion Pharmaceuticals, 121 Seaport Boulevard, Boston, MA 02210.
   - Fax the form to Soliris REMS at 1-877-580-2596 (ALXN); or
   - Scan and email the form to rems@alexion.com

Patient Counseling

HCPs should:

- Counsel patients using both the Patient Safety Brochure and Patient Safety Card. Provide these materials to your patients.
- Remind patients to carry the Patient Safety Card with them at all times.
- Advise their patients that this safety card contains important safety information about the risk of meningococcal infection that they need to be aware of before they are given Soliris and during their treatment with Soliris.
- Remind their patients to show this card to any doctor involved in their treatment.
- Explain to their patients that if they cannot reach their doctor, they should go to the emergency room immediately and show the emergency room staff the Soliris Patient Safety Card. Even if a patient stops using Soliris, they should keep their Soliris Patient Safety Card with them.

To order a Soliris Patient Safety Card, contact Soliris REMS at 1.888.SOLIRIS (1.888.765.4747).

The Spanish versions of the Patient education material can be downloaded from below:

- Spanish Soliris Patient Safety Card
- Spanish Patient Safety Brochure

Reporting Adverse Events

HCPs should report all suspected adverse events, including reports of meningococcal infection by contacting Alexion Pharmaceuticals, Inc. at 1.888.Soliris (1.888.765.4747); or reporting the information to the FDA MedWatch Reporting System by phone at 1.800.FDA.1088 (1.800.332.1088) or by mail using Form 3500 at http://www.fda.gov/MedWatch.
What You Need to Know About Soliris

What is Soliris?
Soliris is a medicine that affects your immune system. Soliris can lower the ability of your immune system to fight infections.

What are the serious risks of Soliris?
Soliris increases your chance of getting serious and life-threatening meningococcal infections. Meningococcal infections may quickly become life threatening and cause death if not recognized and treated early.

Getting Your Vaccine
- Meningococcal vaccines lower the risk of getting a meningococcal infection. However, this vaccine will not prevent all meningococcal infections.
- You must receive a meningococcal vaccination at least 2 weeks before your first dose of Soliris unless you have already had this vaccine(s).
- If your doctor decides that urgent treatment with Soliris is needed, you should receive the meningococcal vaccination as soon as possible.
- If you have not been vaccinated and you must take Soliris right away, you should also receive 2 weeks of antibiotics with your vaccinations.
- If you had a meningococcal vaccine in the past, you might need additional vaccination before you start Soliris. Your doctor will decide if you need additional meningococcal vaccination.

Call your doctor or get emergency medical care right away if you get any of these signs and symptoms of a meningococcal infection:
- Headache with nausea or vomiting
- Headache and a fever
- Headache with a stiff neck or stiff back
- Fever
- Fever and a rash
- Confusion
- Muscle aches with flu-like symptoms
- Eyes sensitive to light

Patient Safety Card
You will receive a Patient Safety Card from your health care provider.
- Carry this card at all times.
- Show this card to any healthcare professional who treats you. This will help them diagnose and treat you quickly.
- Get treatment right away for any symptoms of a meningococcal infection even if you do not have your card on you.

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This is a representation of an electronic record that was signed electronically. Following this are manifestations of any and all electronic signatures for this electronic record.

/s/

BARRY W MILLER  
07/25/2018