Tegsedi

Description

Tegsedi (inotersen)

Background
Tegsedi (inotersen) is an antisense oligonucleotide that causes degradation of mutant and wild-type TTR mRNA through binding to the TTR mRNA, which results in a reduction of serum TTR protein and TTR protein deposits in tissues (1).

Regulatory Status
FDA-approved indication: Tegsedi is a transthyretin-directed antisense oligonucleotide indicated for the treatment of the polyneuropathy of hereditary transthyretin-mediated amyloidosis (hATTR) in adults (1).

Tegsedi has a boxed warning for thrombocytopenia. Tegsedi can cause reductions in platelet count that may result in sudden and unpredictable thrombocytopenia that can be life-threatening. Tegsedi should not be initiated in patients with a platelet count below 100 x 10⁹/L. Patients who are not able to adhere to the recommended laboratory monitoring or to the related treatment recommendations should not receive Tegsedi (1).

Tegsedi also has a boxed warning for glomerulonephritis. Tegsedi can cause glomerulonephritis that may require immunosuppressive treatment and may result in dialysis-dependent renal failure. Tegsedi-treated patients who develop glomerulonephritis will require monitoring and treatment for nephrotic syndrome and its manifestations. Tegsedi should generally not be initiated in patients with a urine protein to creatinine ratio (UPCR) of 1000 mg/g or greater, or eGFR below 45 mL/minute/1.73 m². If acute glomerulonephritis is confirmed, Tegsedi should be...
permanently discontinued. Serum creatinine, estimated glomerular filtration rate (eGFR), urinalysis, and UPCR should be monitored every 2 weeks during treatment with Tegsedi (1).

Tegsedi is only available through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the Tegsedi REMS Program, because of risks of serious bleeding caused by severe thrombocytopenia and because of glomerulonephritis (1).

Other warnings for Tegsedi include: stroke and cervicocephalic arterial dissection; inflammatory and immune effects; liver effects; hypersensitivity reactions/antibody formation; uninterpretable platelet counts; and reduced serum vitamin A levels.

The safety and effectiveness of Tegsedi in pediatric patients have not been established (1).

Related policies
Onpattro

Policy

This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Tegsedi may be considered medically necessary in patients 18 years of age and older with polyneuropathy of hereditary transthyretin-mediated (hATTR) amyloidosis and if the conditions indicated below are met.

Tegsedi is considered investigational in patients less than 18 years of age and for all other indications.

Prior-Approval Requirements

Age

18 years of age and older

Diagnosis

Patient must have the following:

Polyneuropathy of hereditary transthyretin-mediated (hATTR) amyloidosis

AND ALL of the following:

1. Platelet count $\geq 100 \times 10^9/L$
2. eGFR $\geq 45 \text{ mL/minute/1.73 m}^2$
3. Prescriber agrees to monitor the following during therapy:
   a. Platelet count
   b. Renal function (serum creatinine, eGFR, and urinalysis)
   c. Liver function (ALT, AST, and total bilirubin)
4. Patient and prescriber are both enrolled in the Tegsedi REMS Program
5. Prescriber agrees to supplement the patient with the recommended daily allowance of Vitamin A if indicated
6. NO dual therapy with Onpattro (patisiran)

Prior – Approval Renewal Requirements

Age
18 years of age and older

Diagnosis

Patient must have the following:

Polyneuropathy of hereditary transthyretin-mediated (hATTR) amyloidosis

AND ALL of the following:
1. Patient has been assessed for improvement and has experienced a clinical benefit from therapy
2. Platelet count ≥ 100 x 10⁹/L
3. eGFR ≥ 45 mL/minute/1.73 m²
4. Prescriber agrees to monitor the following during therapy:
   a. Platelet count
   b. Renal function (serum creatinine, eGFR, and urinalysis)
   c. Liver function (ALT, AST, and total bilirubin)
5. Patient and prescriber are both enrolled in the Tegsedi REMS Program
6. Prescriber agrees to supplement the patient with the recommended daily allowance of Vitamin A if indicated
7. NO dual therapy with Onpattro (patisiran)

Policy Guidelines

Pre - PA Allowance
None

Prior - Approval Limits
Section: Prescription Drugs  Effective Date: October 1, 2019
Subsection: Neuromuscular Drugs  Original Policy Date: October 12, 2018
Subject: Tegsedi  Page: 4 of 4

Quantity 12 prefilled syringes per 84 days
Duration 12 months

Prior – Approval Renewal Limits
Same as above

Rationale

Summary
Tegsedi (inotersen) is an antisense oligonucleotide that causes degradation of mutant and wild-type TTR mRNA through binding to the TTR mRNA, which results in a reduction of serum TTR protein and TTR protein deposits in tissues. The safety and effectiveness of Tegsedi in pediatric patients have not been established (1).

Prior authorization is required to ensure the safe, clinically appropriate and cost-effective use of Tegsedi while maintaining optimal therapeutic outcomes.

References

Policy History

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<td>October 2018</td>
<td>Addition to PA</td>
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<td>November 2018</td>
<td>Annual review. Addition of Vitamin A supplementation requirement per SME</td>
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<td>Addition of renewal requirement: Patient has been assessed for improvement and has experienced a clinical benefit from therapy</td>
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Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on September 13, 2019 and is effective on October 1, 2019.