

UTILIZATION MANAGEMENT MEDICAL POLICY

POLICY: Neurology – Qalsody Utilization Management Medical Policy

- Qalsody™ (tofersen intrathecal injection – Biogen)

REVIEW DATE: 06/19/2024

OVERVIEW

Qalsody, an antisense oligonucleotide, is indicated for the treatment of **amyotrophic lateral sclerosis (ALS)** in adults who have a **mutation** in the **superoxide dismutase 1 (SOD1) gene**.¹

Guidelines

The American Academy of Neurology (AAN) practice parameter on the care of patients with ALS (last updated 2009; reaffirmed 2023) does not address Qalsody, Relyvrio, Radicava ORS, or Radicava IV.^{2,3} The practice parameter states that riluzole is safe and effective for slowing disease progression to a modest degree and should be offered to patients with ALS. However, riluzole may result in fatigue in some patients and if the risk of fatigue outweighs modest survival benefits, discontinuation of riluzole may be considered. Referral to a specialized multidisciplinary clinic should be considered for patients with ALS to optimize health care delivery, prolong survival, and enhance quality of life.

The European Federation of Neurological Societies (EFNS) guidelines on the clinical management of ALS (2012) also recommend patients be offered treatment with riluzole as early as possible after diagnosis.⁴ Qalsody is not mentioned in these guidelines. The Canadian best practice recommendations for the management of ALS state that riluzole has demonstrated efficacy in improving survival in ALS and there is evidence that riluzole prolongs survival by a median duration of 3 months.⁵ Riluzole should be started soon after the diagnosis of ALS. In a select group of patients, Radicava has been shown to slow decline on the ALS Functional Rating Scale-Revised (ALSFRS-R) scores compared against intravenous (IV) placebo over a 6-month period. The following patients have demonstrated a benefit of Radicava: patients with a disease duration < 2 years, forced vital capacity > 80%, all ALSFRS-R subcomponent scores > 2, and patients who have demonstrated steady decline in the ALSFRS-R over a 3-month period. Evidence for benefit of Radicava IV at other stages of ALS have not been demonstrated. Risks and benefits as well as individualized goals should be considered and discussed before starting therapy with Radicava IV. Qalsody is not mentioned in these guidelines. The European Academy of Neurology in collaboration with European Reference Network for Neuromuscular Diseases (2024) recommend Qalsody as first-line treatment in patients with progressive ALS caused by pathogenic mutations in SOD1.⁷ This treatment should be discussed with patients as it may be associated with serious adverse events. In patients with slow progression, it is important to discuss the balance of potential benefits and harms.

POLICY STATEMENT

Due to the lack of clinical efficacy data, **approval is not recommended** for Qalsody.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

None.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Coverage of Qalsody is not recommended in the following situations:

1. **Amyotrophic Lateral Sclerosis (ALS).** Approval is not recommended due to the unclear clinical benefit of Qalsody and lack of clinical efficacy data. In its pivotal trial (VALOR), no significant difference was observed between Qalsody and placebo in the primary endpoint of change in the ALSFRS-R score, which is a measure of ALS functional status.⁶ The preliminary evidence demonstrated that Qalsody led to greater reduction of mean concentration of plasma neurofilament light chains (a marker of axonal injury and neurodegeneration) [secondary endpoint] compared with placebo. However, it is unknown if decreases in the surrogate biomarker of neurofilament light chain levels improve outcomes for patients. Results from the open-label extension trial and ongoing Phase III trial (ATLAS) are needed to determine whether Qalsody provides clinically meaningful benefit in patients with *SOD1-ALS* and to more clearly define an appropriate population for this therapy.
2. Coverage is not recommended for circumstances not listed in the Recommended Authorization Criteria. Criteria will be updated as new published data are available.

REFERENCES

1. Qalsody™ intrathecal injection [prescribing information]. Cambridge, MA: Biogen; April 2023.
2. Miller RG, Jackson CE, Kasarskis EJ, et al. Practice parameter update: the care of the patient with amyotrophic lateral sclerosis: multidisciplinary care, symptom management, and cognitive/behavioral impairment (an evidence-based review). *Neurology*. 2009 (reaffirmed 2023);73(15):1227-1233.
3. Miller RG, Jackson CE, Kasarskis EJ, et al. Practice parameter update: the care of the patient with amyotrophic lateral sclerosis: drug, nutritional, and respiratory therapies (an evidence-based review). *Neurology*. 2009;73:1218-1226.
4. Andersen PM, Abrahams S, Borasio GD, et al. EFNS guidelines on the clinical management of amyotrophic lateral sclerosis (MALS) – revised report of an EFNS task force. *Eur J Neurol*. 2012;19(3):360-375.
5. Shoesmith C, Abrahao A, Benstead T, et al. Canadian best practice recommendations for the management of amyotrophic lateral sclerosis. *CMAJ*. 2020;192(46):E1453-E1468.
6. Miller TM, Cudkowicz ME, Genge A, et al. Trial of antisense oligonucleotide tofersen for *SOD1* ALS. *N Engl J Med*. 2022;387:1099-110.
7. Damme PV, Al-Chalabi A, Andersen PM, et al. European Academy of Neurology (EAN) guideline on the management of amyotrophic lateral sclerosis in collaboration with European Reference Network for Neuromuscular Diseases (ERN EURO-NMD). *Eur J Neurol*. 2024 Mar 12 [Epub ahead of print].

HISTORY

Type of Revision	Summary of Changes	Review Date
New Policy	--	05/24/2023
Annual Revision	No criteria changes.	06/19/2024