

## Briviact (brivaracetam) Tablet, Solution

### Disclaimer

*Clinical guidelines are developed and adopted to establish evidence-based clinical criteria for utilization management decisions. Clinical guidelines are applicable according to policy and plan type. The Plan may delegate utilization management decisions of certain services to third parties who may develop and adopt their own clinical criteria.*

*Coverage of services is subject to the terms, conditions, and limitations of a member's policy, as well as applicable state and federal law. Clinical guidelines are also subject to in-force criteria such as the Centers for Medicare & Medicaid Services (CMS) national coverage determination (NCD) or local coverage determination (LCD) for Medicare Advantage plans. Please refer to the member's policy documents (e.g., Certificate/Evidence of Coverage, Schedule of Benefits, Plan Formulary) or contact the Plan to confirm coverage.*

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### Summary

Partial-onset seizures, also known as partial seizures, focal seizures or focal-onset seizures, start in a specific area or 'focus' in the brain. There are several subtypes of focal seizures including: focal aware seizures, focal impaired awareness seizures, focal motor seizures, focal nonmotor seizures and focal bilateral tonic-clonic seizures. The specific symptoms of a partial-onset seizure can vary widely depending on the area of the brain where the seizure originates. Focal epilepsy may be due to a focal brain pathology (due to a known syndrome or genetic cause), or be due to an unknown cause. Focal

seizures can be managed with both narrow spectrum (e.g., carbamazepine, gabapentin, oxcarbazepine, phenytoin, phenobarbital, primidone, tiagabine) and broad spectrum anti-seizure medications (e.g., clobazam, felbamate, lacosamide, lamotrigine, levetiracetam, valproate, zonisamide) including Briviact (brivaracetam).

Briviact (brivaracetam) is a prescription medication that is used to treat partial-onset seizures. It is indicated for use in those 1 month of age and older. The exact mechanism by which Briviact (brivaracetam) exerts anti-seizure activity is unknown. However, Briviact (brivaracetam) binds to the synaptic vesicle protein 2A (SV2A) in the brain, which is thought to play a role in the release of neurotransmitters. By doing so, it helps to reduce the excessive electrical signals in the brain that can lead to seizures.

Briviact (brivaracetam) can be used alone or in conjunction with other anti-seizure medications. The exact dosage and administration of Briviact (brivaracetam) will depend on the specific needs of the individual, including their age, weight, and overall health status.

## Definitions

**"Antiepileptic Drugs"** Medications used to prevent or reduce the severity and frequency of seizures in various types of epilepsy.

**"Partial seizures"** are an older term that has been used to describe seizures that start in a specific part of the brain. The term "partial" reflects the fact that these seizures are localized to a specific area at the onset.

**"Focal seizures"** is a term that has been more recently adopted by the International League Against Epilepsy, replacing "partial seizures." This term is more descriptive of the fact that the seizure originates from a specific 'focus' in the brain.

**"Focal-onset seizures (partial-onset seizures)"** are seizures that begin in a specific region or 'focus' of the brain. They can be further categorized into:

- **Focal onset aware seizures:** Seizures where the individual remains conscious and aware throughout the event.
- **Focal onset impaired awareness seizures:** Seizures that impact an individual's consciousness or awareness during the event.

"[s]" indicates state mandates may apply.

## Medical Necessity Criteria for Initial Clinical Review

### Initial Indication-Specific Criteria

#### Focal Seizure

The Plan considers Briviact (brivaracetam) medically necessary when ALL of the following criteria are met:

1. The medication is prescribed by or in consultation with a neurologist or epilepsy specialist; *AND*
2. The member has a diagnosis of focal seizures (i.e., partial-onset seizures, partial seizures); *AND*
3. The member is unable to use, or has tried and failed, TWO (2) alternate antiepileptic drugs as applicable to the member's age (see [Appendix A](#), Table 1). These may include, but are not limited to, the following:<sup>[§]</sup>
  - a. Carbamazepine; *and/or*
  - b. Divalproex; *and/or*
  - c. Fosphenytoin; *and/or*
  - d. Lacosamide; *and/or*
  - e. Lamotrigine; *and/or*
  - f. Levetiracetam; *and/or*
  - g. Methylsuximide; *and/or*
  - h. Oxcarbazepine; *and/or*
  - i. Phenobarbital; *and/or*
  - j. Phenytoin; *and/or*
  - k. Pregabalin; *and/or*
  - l. Primidone; *and/or*
  - m. Tiagabine; *and/or*
  - n. Topiramate; *and/or*
  - o. Valproate; *and/or*
  - p. Valproic acid; *and/or*
  - q. Zonisamide; *AND*
4. IF the request is for Briviact (brivaracetam) 10mg/mL Solution, documentation indicating the member's inability or unwillingness to take the tablet form; *AND*
5. Briviact (brivaracetam) is being prescribed within the manufacturer's published dosing guidelines or falls within dosing guidelines found in a compendia of current literature.

If the above prior authorization criteria are met, the requested product will be authorized for up to a lifetime.<sup>[§]</sup>

## Experimental or Investigational / Not Medically Necessary<sup>[§]</sup>

Briviact (brivaracetam) for any other indication or use is considered not medically necessary by the Plan, as it is deemed to be experimental, investigational, or unproven. Non-covered indications include, but are not limited to, the following:

- Neuropathic Pain. While studies have been conducted with Briviact (brivaracetam) for the management of post-herpetic neuralgia and spinal cord injury-related neuropathic pain, these studies are very small (ranging from 14-152 participants) and are of low quality. Briviact (brivaracetam) does not have FDA approval for any form of neuropathic pain.
- Other forms of Epilepsies. Briviact (brivaracetam) has not been studied and found to be safe and effective for the management of other forms of epilepsy other than focal/focal-onset, partial, partial-onset seizures.
- Postherpetic Neuralgia. The only study assessing Briviact (brivaracetam) for postherpetic neuralgia was small (n=152) and did not result in a significant improvement in average pain intensity between placebo and any dose of Briviact (brivaracetam). Briviact (brivaracetam) does not have FDA approval for postherpetic neuralgia.
- Spinal Cord Injuries. The only study assessing Briviact (brivaracetam) was very small (n=14) and found a small reduction in pain and a high rate of side effects (73% and 33% for Briviact [brivaracetam] and placebo, respectively) for spinal cord injury-related neuropathic pain. Given the low quality data and small sample size, more studies would need to be conducted to evaluate safety and efficacy for this indication.

## References

1. Biton V, Berkovic SF, Abou-Khalil B, Sperling MR, Johnson ME, Lu S. Brivaracetam as adjunctive treatment for uncontrolled partial epilepsy in adults: a phase III randomized, double-blind, placebo-controlled trial. *Epilepsia*. 2014 Jan;55(1):57-66. doi: 10.1111/epi.12433. Epub 2013 Nov 8.
2. Brandt C, Dimova S, Elmoufti S, Laloyaux C, Nondonfaz X, Klein P. Retention, efficacy, tolerability, and quality of life during long-term adjunctive brivaracetam treatment by number of lifetime antiseizure medications: A post hoc analysis of phase 3 trials in adults with focal seizures. *Epilepsy Behav*. 2023 Jan;138:108967. doi: 10.1016/j.yebeh.2022.108967. Epub 2022 Nov 23.
3. Briviact (brivaracetam) oral and intravenous [prescribing information]. Smyrna, GA: UCB Inc; May 2023.
4. Fisher R.S., et al.: Operational classification of seizure types by the International League Against Epilepsy: position paper of the ILAE commission for classification and terminology. *Epilepsia* 2017; 58 (4): pp. 522-530.
5. Gloss D, Pargeon K, Pack A, et al; AAN Guideline Subcommittee. Antiseizure Medication Withdrawal in Seizure-Free Patients: Practice Advisory Update Summary: Report of the AAN Guideline Subcommittee. *Neurology*. 2021 Dec 7;97(23):1072-1081. doi: 10.1212/WNL.00000000000012944. PMID: 34873018.
6. Kanner AM, Ashman E, Gloss D, Harden C, Bourgeois B, Bautista JF, Abou-Khalil B, Burakgazi-Dalkilic E, Llanas Park E, Stern J, Hirtz D, Nespeca M, Gidal B, Faught E, French J. Practice guideline update summary: Efficacy and tolerability of the new antiepileptic drugs I: Treatment of new-onset epilepsy: Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology and the American

- Epilepsy Society. Neurology. 2018 Jul 10;91(2):74-81. doi: 10.1212/WNL.0000000000005755. Epub 2018 Jun 13. PMID: 29898971.
- 7. Kanner AM, Ashman E, Gloss D, Harden C, Bourgeois B, Bautista JF, Abou-Khalil B, Burakgazi-Dalkilic E, Park EL, Stern J, Hirtz D, Nespeca M, Gidal B, Faught E, French J. Practice guideline update summary: Efficacy and tolerability of the new antiepileptic drugs II: Treatment-resistant epilepsy: Report of the American Epilepsy Society and the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology. *Epilepsy Curr*. 2018 Jul-Aug; 18(4):269-278. PMID: 30254528; PMCID: PMC6145395.
  - 8. Krumholz A., et al.: Evidence-based guideline: management of an unprovoked first seizure in adults. Report of the Guideline Development Subcommittee of the American Academy of Neurology and the American Epilepsy Society. *Neurology* 2015; 84 (16): pp. 1705-1713.
  - 9. Kwan P, Trinka E, Van Paesschen W, Rektor I, Johnson ME, Lu S. Adjunctive brivaracetam for uncontrolled focal and generalized epilepsies: results of a phase III, double-blind, randomized, placebo-controlled, flexible-dose trial. *Epilepsia*. 2014 Jan;55(1):38-46. doi: 10.1111/epi.12391. Epub 2013 Oct 3. PMID: 24116853.
  - 10. Lee SK, Heo K, Kim SE, et al. Effect of Number of Previous Antiseizure Medications on Efficacy and Tolerability of Adjunctive Brivaracetam for Uncontrolled Focal Seizures: Post Hoc Analysis. *Adv Ther*. 2021 Jul;38(7):4082-4099. doi: 10.1007/s12325-021-01816-5. Epub 2021 Jun 21.
  - 11. Moseley B, Bourikas D, Dimova S, Elmoufti S, Borghs S. Efficacy and Tolerability of Adjunctive Brivaracetam in Patients with Focal-Onset Seizures on Specific Concomitant Antiseizure Medications: Pooled Analysis of Double-Blind, Placebo-Controlled Trials. *Adv Ther*. 2024 Apr;41(4):1746-1758. doi: 10.1007/s12325-024-02795-z. Epub 2024 Feb 15.
  - 12. Moseley BD, Sperling MR, Asadi-Pooya AA, et al. Efficacy, safety, and tolerability of adjunctive brivaracetam for secondarily generalized tonic-clonic seizures: Pooled results from three Phase III studies. *Epilepsy Res*. 2016 Nov;127:179-185. doi: 10.1016/j.epilepsyres.2016.09.003. Epub 2016 Sep 3.
  - 13. National Institute for Health and Care Excellence (NICE): Epilepsies in children, young people and adults. NICE Guideline NG217. Updated 30 January 2025. Available here: <https://www.nice.org.uk/guidance/ng217>. Accessed 24 June 2025.
  - 14. O'Brien TJ, Borghs S, He QJ, Schulz AL, Yates S, Biton V. Long-term safety, efficacy, and quality of life outcomes with adjunctive brivaracetam treatment at individualized doses in patients with epilepsy: An up to 11-year, open-label, follow-up trial. *Epilepsia*. 2020 Apr;61(4):636-646. doi: 10.1111/epi.16484. Epub 2020 Mar 28.
  - 15. Pack A.M., et al.: Epilepsy overview and revised classification of seizures and epilepsies. *Continuum (Minneapolis Minn)* 2019; 25 (2): pp. 306-321.
  - 16. UCB, Inc. Briviact® (brivaracetam) tablets, oral solution, and injection prescribing information. Smyrna, GA; 2016 Jun.
  - 17. Wang S, Sun H, Wang Z, et al. Adjunctive treatment for pediatric focal epilepsy: a systematic review. *Eur J Clin Pharmacol*. 2025 Apr;81(4):507-523. doi: 10.1007/s00228-025-03807-9. Epub 2025 Feb 13.
  - 18. Winter Y, Sandner K, Vieth T, Gonzalez-Escamilla G, Stuckrad-Barre SV, Groppa S. Third-Generation Antiseizure Medication in the Treatment of Benzodiazepine-Refractory Status Epilepticus in Poststroke Epilepsy: A Retrospective Observational Register-Based Study. *CNS Drugs*. 2023 Oct;37(10):929-936. doi: 10.1007/s40263-023-01039-y. Epub 2023 Oct 2. PMID: 37784006; PMCID: PMC10570217.

## Appendix A

Table 1: Antiepileptic Age-Specific Dosing Guidance

Anti-epileptic Agent	FDA approved age-specific guidance (seizure specific indications)
Briviact (Brivaracetam)	All ages
Carbamazepine (Tegretol)	1 year of age and older (immediate release) 6 years of age and older (extended-release tablets) 1 year of age and older (extended-release capsules)
Divalproex	10 years of age and older
Fosphenytoin	All ages
Lacosamide (Vimpat)	1 month of age and older (partial-onset seizures)  4 years of age and older (primary generalized tonic-clonic seizures)
Lamotrigine (Lamictal)	2 years of age and older (as adjunct: partial-onset, primary generalized tonic-clonic and generalized seizures of Lennox-Gastaut syndrome)  16 years of age and older (as monotherapy)
Levetiracetam (Keppra)	12 years of age and older (juvenile myoclonic epilepsy)  6 years of age and older (primary generalized tonic-clonic seizures)
Methsuximide (Celontin)	All ages
Oxcarbazepine (Trileptal)	4 years of age and older (monotherapy: partial-onset seizures)  2 years of age and older (adjunct therapy: partial-onset seizures)
Phenobarbital	All ages
Phenytoin	All ages
Pregabalin (Lyrica)	1 month of age and older (adjunct therapy: partial onset seizures)
Primidone	1 month of age and older (generalized tonic-clonic seizures or complex partial seizures without prior treatment)  8 years of age and older (generalized tonic-clonic seizures or complex partial seizures already receiving other anticonvulsant therapy)
Tiagabine	12 years of age and older
Topiramate	2 years of age and older

Valproate	10 years of age and older
Valproic acid	10 years of age and older
Zonisamide	16 years of age and older

#### Clinical Guideline Revision / History Information

Original Date: 9/21/2023

Reviewed/Revised: 12/19/2024, 12/01/2025, 03/02/2026