

CARE VALUE POLICY

POLICY: Migraine – Reyvow™ (lasmiditan tablet – Lilly)

DATE REVIEWED: 06/03/2020

OVERVIEW

Reyvow, a serotonin (5-HT) subtype 1F receptor agonist, is indicated for the acute treatment of migraine with or without aura in adults.¹ **Limitations of Use:** Reyvow is not indicated for the preventive treatment of migraine. Reyvow is a first-in-class ditan that binds with high affinity and selectivity to the 5-HT_{1F} receptor.¹⁻⁴ The 5-HT_{1F} receptor subtype is located in the trigeminal ganglion, the trigeminal nucleus caudalis, and cephalic blood vessels. Activation of this receptor does not constrict blood vessels. Migraine involves activation and sensitization of trigeminal nociceptors in the dura mater. Reyvow acts on the trigeminal system without causing vasoconstriction because of its low affinity for 5-HT_{1B} receptors. The precise mechanism of action of Reyvow for the treatment of migraine headache is unknown.¹ The recommended dose is 50 mg, 100 mg, or 200 mg as needed with or without food. No more than one dose should be taken in 24 hours; a second dose has not been shown to be effective for the same migraine attack. Reyvow should not be taken unless the patient can wait at least 8 hours between dosing and driving or operating machinery. The safety of treating an average of more than four migraine attacks in a 30-day period has not been established.

Disease Overview

Migraine is a common, ongoing condition marked by paroxysmal, unilateral attacks of moderate to severe throbbing headache which is aggravated by routine physical activity (e.g., walking or climbing stairs) and associated with nausea, vomiting, and/or photophobia and phonophobia.⁵ Migraine headache episodes typically last 4 to 72 hours, if untreated. Migraine affects approximately 15% of US adults.⁶ Migraines have been defined as chronic or episodic. Chronic migraine is described by the International Headache Society as headache occurring on ≥ 15 days/month for more than 3 months, which has the features of migraine headache on ≥ 8 days/month.⁵ Episodic migraine is characterized by headaches that occur < 15 days/month.⁷ Patients with episodic migraine may transform to chronic migraine over time at a rate of about 2.5% of patients per year. Potential strategies for preventing migraine transformation include preventing and treating headaches, lifestyle modifications, or effective management of comorbidities (e.g., obesity, obstructive sleep apnea, depression, anxiety). Episodic migraine is more common than chronic migraine; however, chronic migraine is associated with a markedly greater personal and societal burden.

Triptans (e.g., almotriptan, eletriptan, frovatriptan, naratriptan, rizatriptan, sumatriptan, and zolmitriptan) are considered the gold standard for acute treatment of moderate to severe migraine headaches or mild to moderate migraine headaches that respond poorly to over-the-counter (OTC) analgesics. An updated assessment of the **preventive and acute treatment of migraine by the American Headache Society** (2018) lists the triptans and dihydroergotamine as effective treatments for moderate or severe acute migraine attacks and mild to moderate attacks that respond poorly to nonsteroidal anti-inflammatory drugs (NSAIDs) or caffeinated combinations (e.g., aspirin + acetaminophen + caffeine).⁸ Treat at the first sign of pain to improve the probability of achieving freedom from pain and reduce attack-related disability.

Safety

Reyvow may cause significant driving impairment.¹ Patients should not engage in potentially hazardous activities requiring complete mental alertness, such as driving a motor vehicle or operating machinery, for at least 8 hours after each dose of Reyvow, and those who cannot follow this advice should not take Reyvow. In a study of healthy volunteers, driving performance was assessed at 90 minutes after administration of Reyvow 50 mg, 100 mg, 200 mg, alprazolam 1 mg, and placebo in a randomized, double-blind, placebo- and active-controlled, five-period crossover study using a computer-based driving simulation (n = 90). Driving performance was evaluated using a validated threshold established in a population with blood alcohol concentration of 0.05%. The primary outcome measure was the difference from placebo in the standard deviation of lateral position (SDLP), a measure of driving performance. All doses of Reyvow exhibited a dose-dependent impairment of simulated driving performance at 90 minutes after administration. In a separate randomized, double-blind, placebo- and active-controlled, four-period crossover study in healthy volunteers, driving performance was assessed at 8, 12, and 24 hours after administration of Reyvow 100 mg or 200 mg, using diphenhydramine 50 mg as the control (n = 67). The study evaluated computer-based simulated driving performance with the primary endpoint of SDLP. The mean SDLP did not reach the threshold for driving impairment at ≥ 8 hours after administration of Reyvow 100 or 200 mg.

Reyvow may also cause CNS depression, including dizziness and sedation, and should be used with caution if used in combination with alcohol or other CNS depressants.¹ In controlled clinical trials, dizziness and increased systolic blood pressure occurred more frequently in patients who were ≥ 65 years of age compared with patients who were < 65 years of age. In general, dose selection for an elderly patient should be cautious, starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

POLICY STATEMENT

Prior authorization is recommended for prescription benefit coverage of Reyvow. All approvals are provided for the duration noted below.

Automation: None.

RECOMMENDED AUTHORIZATION CRITERIA

Coverage of Reyvow is recommended in those who meet the following criteria:

FDA-Approved Indications

- 1. Migraine, Acute Treatment.** Approve for 1 year if the patient meets the following criteria (A and B):
 - A)** Patient is ≥ 18 years of age; AND
 - B)** Patient meets ONE of the following (i or ii):
 - i.** Patient has tried at least one triptan therapy; OR
 - ii.** Patient has a contraindication to triptan(s) according to the prescriber.

CONDITIONS NOT RECOMMENDED FOR APPROVAL

Reyvow has not been shown to be effective, or there are limited or preliminary data or potential safety concerns that are not supportive of general approval for the following conditions. Rationale for non-coverage for these specific conditions is provided below. (Note: This is not an exhaustive list of Conditions Not Recommended for Approval.)

1. 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. Reyvow® tablets [prescribing information]. Indianapolis, IN: Lilly USA, LLC; October 2019.
2. Do TP, Guo S, Ashina M. Therapeutic novelties in migraine: new drugs, new hope? *J Headache Pain.* 2019;20(1):37.
3. Kuca B, Silberstein SD, Wietecha L, et al. Lasmiditan is an effective acute treatment for migraine. *Neurology.* 2018;91:e2222-e2232.
4. Goadsby PJ, Wietecha LA, Dennehy EB, et al. Phase 3 randomized, placebo-controlled, double-blind study of lasmiditan for acute treatment of migraine. *Brain.* 2019;142:1894-1904.
5. Headache Classification Subcommittee of the International Headache Society. The International Classification of Headache Disorders: 3rd edition (beta version). *Cephalalgia.* 2013;33:629-808.
6. MacGregor EA. In the clinic. Migraine. *Ann Intern Med.* 2017;166(7):ITC49-ITC64.
7. Lipton RB, Silberstein SD. Episodic and chronic migraine headache: breaking down barriers to optimal treatment and prevention. *Headache.* 2015;52:103-122.
8. American Headache Society. The American Headache Society position statement on integrating new migraine treatments into clinical practice. *Headache.* 2019;59:1-18.

HISTORY

Type of Revision	Summary of Changes	Date Reviewed
New Policy	--	06/03/2020