Medication Policy Manual

Policy No: dru296

Topic: Fycompa®, perampanel

Date of Origin: March 15, 2013

Committee Approval Date: March 14, 2014

Next Review Date: March 2015

Effective Date: April 1, 2014

IMPORTANT REMINDER

This Medical Policy has been developed through consideration of medical necessity, generally accepted standards of medical practice, and review of medical literature and government approval status.

Benefit determinations should be based in all cases on the applicable contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control.

The purpose of medical policy is to provide a guide to coverage. Medical Policy is not intended to dictate to providers how to practice medicine. Providers are expected to exercise their medical judgment in providing the most appropriate care.

Description

Perampanel (Fycompa) is an orally administered antiepileptic medication used to treat multi-drug resistant seizures.
**Policy/Criteria**

I. Most contracts require prior authorization approval of perampanel prior to coverage. Perampanel may be considered medically necessary when criteria A and B, below are met.

   A. Diagnosis of epilepsy.

   AND

   B. Two other antiepileptic medications have been ineffective or not tolerated. (See Appendix 1)

   AND

   C. Perampanel is used in combination with at least one other antiepileptic medication. (See Appendix 1)

II. Administration, Quantity Limitations, and Authorization Period

   A. RegenceRx considers perampanel to be a self-administered medication.

   B. When prior authorization is approved, perampanel may be authorized in quantities of 30 per month.

   C. Authorization shall be reviewed at least annually to confirm that current medical necessity criteria are met and that the medication is effective.

III. Perampanel is considered investigational when used for all other conditions, including but not limited to:

   A. Parkinson’s disease

   B. Diabetic neuropathy

   C. Post-Herpetic neuralgia

**Position Statement**

- The evidence for perampanel is limited to epileptic patients who have had prior ineffective therapy with at least two antiepileptic medications and in combination with at least one other antiepileptic medication. \(^{[1-3]}\)

- Perampanel is associated with significant safety concerns and carries boxed warnings for serious or life-threatening behavioral or physiatric change which could include aggression, hostility, anger or homicidal ideation. \(^{[4]}\)

- Perampanel possesses a novel mechanism of action and is the first glutamate receptor antagonist reducing neuronal excitation at post synaptic AMPA receptors. \(^{[5]}\) However, it does not have a track record of safety evidence and its profile is still developing.
There are many proven antiepileptic medication treatment options with long track records of evidence for safety and clinical experience in the treatment of epilepsy. (See Appendix 1)

Clinical Efficacy

SEIZURE

Perampanel demonstrated improved seizure control for multi-drug resistant epilepsy patients when used in combination with other antiepileptic medications. However, there is no evidence that perampanel is safer or more effective than less costly generic options.

- Three double-blind, randomized controlled trials comprise the evidence for perampanel in the treatment of partial-onset seizures for patients with multi-drug resistant epilepsy. [1-3]
  - The trials evaluated once-daily administration of perampanel or placebo in combination with other antiepileptic medications.
  - The primary endpoint was percent change in seizure frequency over a 28 day period. It was determined by comparing the patient’s seizure frequency at baseline to the maintenance period.
  - In all three trials, the perampanel treatment arm demonstrated a consistent reduction of seizure frequency when compared to the placebo treatment arm.
  - Each trial was associated with a moderate attrition rate (>10%), which could have influenced the relationship between overall risk and actual benefit of the medication.
  - The concomitant antiepileptic medications that enrolled patients used prior to adjunct therapy with perampanel or placebo was not identified and limits the generalizability of efficacy.
  - Dose titration may require frequent adjustment; however, perampanel is available in 2 mg increments to meet the needs of all doses necessitated by patients and is approved for once-daily administration.

USE IN OTHER CONDITIONS

- Perampanel has failed to show benefit in several different conditions including Parkinson’s disease, diabetic neuropathy and post-herpetic neuralgia.

  Parkinson’s disease [6-8]
    * Two phase III trials studied the potential of perampanel to improve motor skills in patients with Parkinson’s disease.
    * Perampanel failed to significantly improve motor skills when compared to placebo and to date; no evidence has been published that demonstrates perampanel is effective for patients with Parkinson’s disease.
Diabetic neuropathy and Post-Herpetic neuralgia [6]

* Two phase II trials have evaluated perampanel for reduction of pain in diabetic neuropathy and post-herpetic neuralgia.
* Preliminary, unpublished data shows that perampanel failed to improve pain scores when compared to placebo. Larger, well-controlled trials are necessary to support the benefit of perampanel in this population.

Safety [4]
- Perampanel carries a boxed warning for serious or life-threatening behavioral or psychiatric change which could include aggression, hostility, anger or homicidal ideation.
- Common adverse events associated with perampanel appear to be dose-related and include dizziness, somnolence, fatigue, irritability, nausea, vertigo, and gait disturbance.

Appendix 1: Medications for Treatment of Epilepsy [9]

<table>
<thead>
<tr>
<th>Class</th>
<th>Common Examples</th>
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<tbody>
<tr>
<td>Hydantoins</td>
<td>phenytoin, ethosuximide (Celontin®)</td>
</tr>
<tr>
<td>Succinimides</td>
<td>ethosuximide, methsuximide (Celontin®)</td>
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<tr>
<td>Sulfonamides</td>
<td>zonisamide</td>
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<td>Unclassified</td>
<td>Carbamazepine, gabapentin, levetiracetam, oxtcarbazepine, primidone, topiramate,</td>
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<tr>
<td></td>
<td>divalproex sodium, valproic acid, valproate sodium, felbamate, lamotrigine,</td>
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<tr>
<td></td>
<td>lacosamide (Vimpat®), pregabalin (Lyrica®), rufinamide (Banzel®), tiagabine</td>
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<tr>
<td></td>
<td>(Gabitril®), vigabatrin (Sabril®), ezogabine (Potiga®), corticotropin gel</td>
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Cross References

Lyrica®, pregabalin, RegenceRx Medication Policy Manual, Policy No. dru122
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References