FIRST TIME GENERIC APPROVAL

Brand Name	Lyrica® CR
Generic Name	pregabalin
Drug Manufacturer	Alvogen Pine Brook

New Drug Approval

TYPE OF CLINICAL UPDATE

First Time Generic

FDA APPROVAL DATE

April 13, 2021

LAUNCH DATE

April 13, 2021

REVIEW DESIGNATION

Standard

TYPE OF REVIEW

Abbreviated New Drug Application (ANDA): 211593

DISPENSING RESTRICTIONS

Open Distribution

Overview

INDICATION FOR USE

Pregabalin is indicated for the management of:

- Neuropathic pain associated with diabetic peripheral neuropathy (DPN)
- Postherpetic neuralgia (PHN)

MECHANISMS OF ACTION

Pregabalin binds with high affinity to the alpha2-delta site (an auxiliary subunit of voltage-gated calcium channels) in central nervous system tissues. Although the mechanism of action of pregabalin has not been fully elucidated, results with genetically modified mice and with compounds structurally related to pregabalin (such as gabapentin) suggest that binding to the alpha2-delta subunit may be involved in pregabalin's anti-nociceptive and antiseizure effects in animals. In animal models of nerve damage, pregabalin has been shown to reduce calcium-dependent release of pro-nociceptive neurotransmitters in the spinal cord, possibly by disrupting alpha2-delta containing-calcium channel trafficking and/or reducing calcium currents. Evidence from other animal models of nerve damage and persistent pain suggest the anti-nociceptive activities of pregabalin may also be mediated through interactions with descending noradrenergic and serotonergic pathways originating from the brainstem that modulate pain transmission in the spinal cord.

While pregabalin is a structural derivative of the inhibitory neurotransmitter gamma-aminobutyric acid (GABA), it does not bind directly to GABAA, GABAB, or benzodiazepine receptors, does not augment GABAA responses in

cultured neurons, does not alter rat brain GABA concentration or have acute effects on GABA uptake or degradation. However, in cultured neurons prolonged application of pregabalin increases the density of GABA transporter protein and increases the rate of functional GABA transport. Pregabalin does not block sodium channels, is not active at opiate receptors, and does not alter cyclooxygenase enzyme activity. It is inactive at serotonin and dopamine receptors and does not inhibit dopamine, serotonin, or noradrenaline reuptake.

DOSE FORM AND STRENGTH

Extended-release oral tablets: 82.5 mg, 165 mg, and 330 mg.

DOSE & ADMINISTRATION

- Pregabalin should be administered once daily after an evening meal. It should be swallowed whole and should not be split, crushed, or chewed.
- Dosing recommendations for Pregabalin:

Indication	Dosing Regimen	Initial Dose	Maximum Dose
DPN Pain	Single dose per day	165 mg/day	330 mg/day within 1 week.
PHN	Single dose per day	165 mg/day	330 mg/day within 1 week. Maximum dose of 660 mg/day.