WESTERN NEUROPATHY ASSOCIATION
P.O. Box 4740, Auburn, CA 95604 • (888) 556-3356 • info@pnhelp.org • www.pnhelp.org

Pharmacotherapy for Neuropathic Pain: A Systematic Review and Meta-Analysis

Neuropathic Pain Special Interest Group. (2025). *Lancet Neurology 24*, 413–28.

The **Neuropathic Pain Special Interest Group** of the **International Association For The Study Of Pain (IASP)** aimed to update the original 2015 treatment recommendations and for the first time evaluated both pharmacological and neuromodulation treatment of people with neuropathic pain. The **update is based on new evidence from randomized controlled trials, emerging neuromodulation techniques, and advances in evidence synthesis**. For this systematic review and meta-analysis, we searched Embase, PubMed, the International Clinical Trials Registry, and ClinicalTrials.gov from data inception for neuromodulation trials and from Jan 1, 2013, for pharmacological interventions until Feb 12, 2024. Our results support a revision of the Neuropathic Pain Special Interest Group recommendations for the treatment of neuropathic pain. Below are **updated first-line, second-line and third-line recommendations** for the drugs or drug classes or neuromodulation treatments for neuropathic pain with inconclusive recommendations or recommendations against use.

	Daily dosage and dose regimen	Recommendation
Stong recommendation for use		
Gabapentinoids	**Gabapentin** 1200-3600 mg in three divided doses **Gabapentin ER** 1200-3600 in two divided doses **Pregabalin** 150-600 mg in two divided doses **Mirogabalin** 10-30 mg in two divided doses *(**mirogabalin** not approved in US)*	First line
Serotonin-norepinephrine reuptake inhibitors (SNRIs)	**Duloxetine** 60-120 mg once a day **Venlafaxine** 150-225 mg once a day or in two divided doses	First line
Tricyclic antidepressants (TCAs)	25-150 mg once a day or in two divided doses	First line
Weak recommendation for use		
Lidocaine 5% plasters	1-3 plasters to the painful area for up to 12 h per day	Second line
Capsaicin 8% patches	1-4 patches to the painful area for 30-60 min with a minimal application interval of 60 days	Second line
Capsaicin creams	Usually 0.075% one to three times per day	Second line
Botulinum toxin type A	50-300 units to the painful area every 3 months	Third line
Repetitive Transcranial Magnetic Stimulation (rTMS) (10-20 Hz targeting M1)	1200-3000 pulses per session	May be used in selected patients
Opioids	Usually <120 mg morphine equivalent in two divided doses Tramadol 200-400 mg in 2 extended release doses or 3 regular doses	May be used in selected patients

Inconclusive evidence for use: Carbamazepine-oxcarbazepine, Lacosamide, Lamotrigine, NMDA Receptors, Selective Serotonin Reuptake Inhibitors (SSRIs), Transcranial direct current stimulation, Transcutaneous electrical nerve stimulation, Spinal cord stimulation and Topiramate.

Recommendations against use: Cannabinoids, Valproate, Levetiracetam and Mexiletine.

Study concluded that treatment outcomes are modest and for some treatments uncertainty remains. Further large placebo-controlled or sham-controlled trials done over clinically relevant timeframes are needed.