Drug Class Review on Drugs for Neuropathic Pain

Final Report Evidence Tables

October 2007

The Agency for Healthcare Research and Quality has not yet seen or approved this report

A literature scan of this topic is done periodically

The purpose of this report is to make available information regarding the comparative effectiveness and safety profiles of different drugs within pharmaceutical classes. Reports are not usage guidelines, nor should they be read as an endorsement of, or recommendation for, any particular drug, use or approach. Oregon Health & Science University does not recommend or endorse any guideline or recommendation developed by users of these reports.

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Note: A scan of the medical literature relating to the topic is done periodically (see http://www.ohsu.edu/ohsuedu/research/policycenter/DERP/about/methods.cfm for scanning process description). Upon review of the last scan, the Drug Effectiveness Review Project governance group elected not to proceed with another full update of this report. Some portions of the report may not be up to date.

TABLE OF CONTENTS

Evidence	Table 1. S	SYSTEMATIC REVIEWS OF DRUGS FOR NEUROPATHIC PAIN	3
Evidence	Table 2.	QUALITY ASSESSMENT OF INCLUDED SYSTEMATIC REVIEWS	31
Evidence		CHARACTERISTICS OF RCTS OF PREGABALIN, GABAPENTIN, SNRIS, AND TOPICAL FOR NEUROPATHIC PAIN	35
Evidence		PATIENT-REPORTED PAIN OUTCOMES IN PLACEBO CONTROLLED TRIALS OF IN, GABAPENTIN, SNRIS AND TOPICAL LIDOCAINE FOR NEUROPATHIC PAIN	57
Evidence		OBSERVER-REPORTED PAIN OUTCOMES IN PLACEBO-CONTROLLED TRIALS OF IN, GABAPENTIN, SNRIS AND TOPICAL LIDOCAINE FOR NEUROPATHIC PAIN	78
Evidence		FUNCTIONAL OUTCOMES IN PLACEBO-CONTROLLED TRIALS OF PREGABALIN, IN, SNRIS AND TOPICAL LIDOCAINE FOR NEUROPATHIC PAIN	82
Evidence		OTHER OUTCOMES IN RCTS OF PREGABALIN, GABAPENTIN, SNRIS AND TOPICAL FOR NEUROPATHIC PAIN	92
Evidence		CHARACTERISTICS OF PLACEBO-CONTROLLED TRIALS OF OTHER ANTIDEPRESSANTS, ANTIDEPRESSANTS, SSRIS AND DEXTROMETHORPHAN FOR NEUROPATHIC PAIN	100
Evidence	ANTIEPILER	PATIENT-REPORTED PAIN OUTCOMES IN PLACEBO-CONTROLLED TRIALS OF OTHER PTICS, TRICYCLIC ANTIDEPRESSANTS, SSRIS, AND DEXTROMETHORPHAN FOR THIC PAIN	118
Evidence		FUNCTIONAL OUTCOMES IN PLACEBO-CONTROLLED TRIALS OF OTHER ANTIEPILEPTICS, ANTIDEPRESSANTS, SSRIS, AND DEXTROMETHORPHAN FOR NEUROPATHIC PAIN	139
Evidence	Table 11.	QUALITY ASSESSMENT OF INCLUDED RANDOMIZED CONTROLLED TRIALS	142
Evidence		ADVERSE EVENTS IN PLACEBO CONTROLLED TRIALS OF PREGABALIN, GABAPENTIN, ID TOPICAL LIDOCAINE FOR NEUROPATHIC PAIN	163
Evidence		ADVERSE EVENTS IN PLACEBO-CONTROLLED TRIALS OF OTHER ANTIEPILEPTICS,	176

Author Year		Databases searched; Literature search dates;		Number of trials/
(Quality)	Aims	Other data sources	Eligibility criteria	Number of patients
Finnerup, 2005 (5)	To update existing systematic reviews to include more recent trials, to provide up-to-date calculations of NNT and NNH in neuropathic pain as the basis of a proposal for an evidence-based treatment algorithm	1966 to April 2005 References lists, author queries for dichotomous	Randomized double-blind studies in neuropathic pain conditions using chronic dosing and placebo studying at least 10 patients; English language; cancer pain excluded except for well-defined post-mastectomy pain syndromes and postsurgical pain with post-operative pain compatible with a nerve section.	105 trials (31 of drugs included in DERP review)

Drugs for Neuropathic Pain Page 2 of 200

Author		Databases searched;		
Year		Literature search dates;		Number of trials/
(Quality)	Aims	Other data sources	Eligibility criteria	Number of patients
Hempenstall, 2005 (7)	To conduct a systematic	MEDLINE, EMBASE,	Trials that examined adult patients with zoster-associated pain for greater than 3 months, were blinded, randomized, and had at least one clinically relevant measure of pain outcome. Unpublished, letter, and abstract-only studies were excluded as were studies on prevention of PHN and anecdotes. Studies where data for PHN were not analyzed separately from other neuropathic pain syndromes were also excluded.	35 trials

Drugs for Neuropathic Pain

Page 3 of 200

Author Year (Quality)	Aims	Databases searched; Literature search dates; Other data sources	Eligibility criteria	Number of trials/ Number of patients
Saarto, 2005 (Cochrane Review) (4)	To determine the analgesic effectiveness and adverse effects of antidepressant drugs in treatment of neuropathic pain.	1966 to December 2003	RCTs of antidepressants in treatment of neuropathic pain, published and unpublished trials eligible, no language restrictions. Abstracts and reviews excluded. Studies could have taken place in any care setting (inpatient, outpatient, day care, community). Studies with less than 10 patients excluded. Studies in adults over age 18. Migraine and headache studies excluded.	50 trials; 2515 patients
Wiffen, 2005 (Gabapentin, Cochrane Review)	To evaluate the analgesic effectiveness of gabapentin	1966 to November 2004	RCTs of the analgesic effects of gabapentin, with pain assessment as either the primary or a secondary outcome. Full journal publication was required, abstracts not included. Adult patients age 18 and older with neuropathic pains including diabetic neuropathy, post-herpetic neuralgia, phantom limb pain, Guillain Barre, and spinal cord injury.	15 trials; 1468 patients

Drugs for Neuropathic Pain Page 4 of 200

Author		Databases searched;		
Year		Literature search dates;		Number of trials/
(Quality)	Aims	Other data sources	Eligibility criteria	Number of patients
Wiffen, 2005	To evaluate the analgesic	1966 to November 2004	RCTs which investigated the analgesic	11 trials in chronic pain (1
	effectiveness of		effects of carbamazepine in neuropathic	acute); 364 patients
e, Cochrane	carbamazepine in acute		pain, with pain assessment as either the	
Review)	and chronic pain and to		primary or secondary outcome, adults	
(4)	evaluate adverse effects		ages 18 to 84. Excluded non-	
	reported in the clinical		randomized studies, studies of	
	trials		experimental pain, case reports, clinical	
			observations, or studies of	
			carbamazepine used to treat pain	
			produced by other drugs.	

Drugs for Neuropathic Pain Page 5 of 200

Author		Databases searched;		
Year		Literature search dates;		Number of trials/
(Quality)	Aims	Other data sources	Eligibility criteria	Number of patients
Khaliq, 2007 Topical Lidocaine, Cochrane Review (6)	randomized trials of the use of topical lidocaine and examine its efficacy and safety in the	Medline, Embase, Lilacs, SIGLE for conference proceedings, citation index, reference lists, key	All randomized and quasi-randomized trials that compare the use of topical lidocaine in the treatment of post herpetic neuralgia, with placebo or any other active treatment. Patients of any age who fulfil the criteria which approximate to the definition of postherpetic neuralgia posed by McDonald 2000. Included interventions are topical applications of all lidocaine, such as patch and gel preparations. Trials will be included where topical lidocaine is administered in any setting by any person.	3 trials, 314 patients

Drugs for Neuropathic Pain Page 6 of 200

Author		Databases searched;		
Year		Literature search dates;		Number of trials/
(Quality)	Aims	Other data sources	Eligibility criteria	Number of patients
Wiffen (lamotrigine), Cochrane review (6)	To assess the analgesic efficacy and adverse effects of anticonvulsant lamotrigine for acute and chronic pain	1966-2006 Medline, Embase, the Cochrane Library, reference lists of retrieved papers, and contacting investigators.	RCTs which investigated the analgesic effects of lamotrigine in patients with pain assessment as either the primary or secondary outcome were included. Full journal publications were required, abstracts not included. Non randomized studies, studies of experimental pain, case reports, clinical observations, or studies of lamotrigine used to treat pain produced by other drugs were not included. Adults aged 18 and over were included. Participants complaining of pain in either the acute pain setting or suffering from a wide range of neuropathic pains including diabetic neuropathy, post-herpetic neuralgia, phantom-limb pain, trigeminal neuralgia, Guillain Barre and spinal cord injury were included. Trials of participants with more than one type of neuropathic pain were also included.	7 trials, 502 patients: 59 patients with diabetic neuropathy, 269 patients with HIV related neuropathy, 100 with intractable neuropathic pain, 30 with spinal cord injury related pain, 14 with trigeminal neuralgia, 30 with central post stroke pain

Drugs for Neuropathic Pain Page 7 of 200

Author		Databases searched;		
Year		Literature search dates;		Number of trials/
(Quality)	Aims	Other data sources	Eligibility criteria	Number of patients
Wong, 2007 (5)	To evaluate the effects of treatments for the symptom of painful diabetic neuropathy.	1966-Oct 2006 Medline (R), Embase, EMB reviews-AP journal club, CCRT, reference lists	Adults 18 years and above with diabetic neuropathy. The interventions involved the administration of oral or topical analgesics. Classes of drugs included paracetamol, antidepressants, opioids, NSAIDS, N-methyl-D-aspartate antagonists, tramadol, capsaicin and anticonvulsants. The comparator was a placebo. RCTs that investigated the analgesic effects of pain relieving drugs for patients with diabetic neuropathy. English language publications were included.	A total of 25 trials:1576 patients on anticonvulsants, 94 patients on antidepressants 805 patients on SNRI, 173 patients on lon channel blockers, 14 patients on NMDA antagonists, 329 patients on opioids, 299 patients on topical agents.

Drugs for Neuropathic Pain Page 8 of 200

Author	Characteristics of		Characteristics of		
Year	identified articles: study	Characteristics of identified	identified articles:		Main efficacy
(Quality)	designs	articles: populations	interventions	Data synthesis methods	outcome
<u> </u>	105 placebo-controlled trials: 59 crossover, 46 parallel design; 5 studies used an active placebo	Patients with central post- stroke pain, spinal cord injury pain, multiple sclerosis, painful polyneuropathy, post-herpetic neuralgia, phantom limb pain, post-mastectomy and post- surgical pain, brachial plexus avulsion, trigeminal neuralgia, HIV-neuropathy, and mixed neuropathic pain	Antidepressants (26 trials), anticonvulsants (39),	NNT and NNH calculated if relative risk statistically significant. Data pooled assuming clinically homogenous trials.	More than 50% pain relief.

Drugs for Neuropathic Pain Page 9 of 200

Author	Characteristics of		Characteristics of		
Year	identified articles: study	Characteristics of identified	identified articles:		Main efficacy
(Quality)	designs	articles: populations	interventions	Data synthesis methods	outcome
Hempenstall, 2005 (7)	35 trials: 18 crossover, 17 parallel group; 31 placebo-controlled (including active placebo). 4 active control studies without a placebo group, not included in meta-analysis	Post-herpetic neuralgia. Definition of PHN was pain persisting for longer than 3 months after the crusting of skin lesions following an acute attack of herpes zoster.	Tricyclic antidepressants (7 trials; 5 with dichotomous data included in meta-analysis), gabapentin (2 trials), pregabalin (2 trials), dextromethorphan (2 trials), topical lidocaine (3 trials, 1 with dichotomous data included in meta-analysis); also memantine, opioids, tramadol, capsaicin, topical NSAIDs, i.v. lidocaine, intrathecal therapies, other therapies.	Quantitative analysis on trials where dichotomous data were available. Calculated relative benefit and NNT for efficacy, relative risk and NNH for safety. If tests of homogeneity were favorable, pooling of data for groups of similar treatments. Qualitative comment on studies from which dichotomous data could not be extracted.	Hierarchy of outcome measures used: 1) top 2 values on a 5-point patient-reported global scale for pain relief or effectiveness or improvement; 2) top 3 values on a 6-point patient-reported global scale for pain relief or effectiveness or improvement; 3) top value on a 3-point patient-reported global scale for pain relief or effectiveness or improvement; 4) top 2 values on a 4-point patient-reported categorical pain-relief scale; 5) 50% or greater reduction on a visual analogue or 11-point numerical rating scale for pain intensity.

Drugs for Neuropathic Pain Page 10 of 200

Author	Characteristics of		Characteristics of		
Year	identified articles: study	Characteristics of identified	identified articles:		Main efficacy
(Quality)	designs	articles: populations	interventions	Data synthesis methods	outcome
Saarto, 2005 (Cochrane Review) (4)	50 trials: 20 parallel design, 30 crossover.	Diabetic neuropathy (17 studies), postherpetic	Tricyclic antidepressants (amitriptyline, clomipramine,	Where appropriate, data from included studies were combined. For dichotomous variables, the Relative Benefit expressed as Relative Risk (RR) with 95% CI. Results were reported as NNT for pain relief and NNH for mild and severe adverse drug reactions.	Number of patients with global improvement or pain relief available in 33 studies; in 17 studies only mean data were available
Wiffen, 2005 (Gabapentin, Cochrane Review)	15 trials	Acute pain (1 trial), chronic post-herpetic neuralgia (2), diabetic neuropathy (7), cancer related pain (1), phantom limb pain (1), Guilland Barre (1), spinal cord injury pain (1), mixed neuropathic pains (1). Participants ages 18-90 years.	Gabapentin only	NNTs were calculated as the reciprocal of the absolute risk reduction. For unwanted effects, the NNT becomes NNH and is calculated the same way.	Hierarchy of outcome measures used: 1) Patient reported pain relief of 50% or greater; 2) patient reported global impression of change; 3) pain on movement; 4) pain on rest; 5) any other pain related measure.

Drugs for Neuropathic Pain Page 11 of 200

Author	Characteristics of		Characteristics of		
Year	identified articles: study	Characteristics of identified	identified articles:		Main efficacy
(Quality)	designs	articles: populations	interventions	Data synthesis methods	outcome
Wiffen, 2005	(articles: populations 7 trials in trigeminal neuralgia, 2 in diabetic neuropathy, 1 post-herpetic neuralgia, 1 post- stroke pain.	Carbamazepine	NNTs were calculated as the reciprocal of the absolute risk reduction. For unwanted effects, the NNT becomes NNH and is calculated the same way.	A hierarchy of outcome measures used: 1) patient reported pain relief of 50% or greater; 2) patient reported global impression of clinical change; 3) pain on movement; 4) pain on rest or spontaneous pain; 5) any other pain related outcome 6) adverse events

Drugs for Neuropathic Pain Page 12 of 200

ticles: populations trials of patients with ostherpetic neuralgia, pain ersisting at the site of	All included studies	Data synthesis methods Relative Risks (RR) with 95%	Main efficacy outcome The primary outcome
trials of patients with ostherpetic neuralgia, pain ersisting at the site of	All included studies compared topical lidocaine	Relative Risks (RR) with 95%	The primary outcome
estherpetic neuralgia, pain ersisting at the site of	compared topical lidocaine	` ,	
ersisting at the site of		confidence intervals (CI s) and	
-	to placebo. One trial used		measure is the mean
ingles at least one month		risk differences (RDs) with 95%CI	improvement in the
	3	for dichotomous outcome	patient's reports of pain
•	•		relief measured by a
•	•		categorical scale such
•		continuous outcomes. If	as the 6 point pain
·			relief scale. Secondary
			outcomes were i) mean
,			reduction in VAS
		•	scores at any time after
		. ,	randomization, II)
			highest recorded blood
			lidocaine level at any
			time between 4 hours
			and 30 days, iii)
		-	proportion of patients
			with adverse skin
		wherever appropriate.	reactions. Two trials
			provided data on pain
			relief, while the
			remaining study
			provided data on
			secondary outcome
			measures.
to ea	r the onset of acute rash). tal of 182 patients were ted with topical lidocaine 132 control patients.	vehicle gel, while others used lidocaine patches. All the lidocaine concentrations that were used, whether gel or patch were 5%.	vehicle gel, while others used lidocaine patches. All the lidocaine concentrations that were used, whether gel or patch were 5%. vehicle gel, while others used lidocaine patches. All the lidocaine concentrations that were used, whether gel or patch were 5%. measures, and weighted mean difference with 95% CI for continuous outcomes. If statistical heterogeneity was found, sensitivity analysis was done by repeating calculations after omitting the trials which had low scores on individual quality items. If there were still some unexplained heterogeneity, "random-effects" methods was used to combine studies. Statistical analysis was undertaken to obtain NNT data wherever appropriate.

Drugs for Neuropathic Pain Page 13 of 200

Author	Characteristics of		Characteristics of		
Year	identified articles: study	Characteristics of identified	identified articles:		Main efficacy
(Quality)	designs	articles: populations	interventions	Data synthesis methods	outcome
Wiffen (lamotrigine), Cochrane review (6)	7 studies are randomized double blind placebo controlled studies. 3 are cross over studies	Central post stroke pain(1 trial), diabetic neuropathy(1 trial), HIV related neuropathy (2 trials), intractable neuropathic pain (1 trial), spinal cord injury related pain (1 trial), and trigeminal neuralgia (1 trial). Participants were aged between 26-77 years.	Administration of	NNT was calculated as the reciprocal of the absolute risk reduction. For unwanted effects, NNT becomes NNH. Dichotomous data were used to calculate relative risk with 95% confidence intervals using fixed effect models unless significant statistical heterogeneity was found.	a hierarchy of outcome measures used: 1) patient reported pain relief of 50% or greater; 2) patient reported global impression of clinical change; 3) pain on movement; 4) pain on rest; 5) any other pain related outcome 6) adverse event with a subgroup analysis of elderly if data were available

Drugs for Neuropathic Pain Page 14 of 200

Author	Characteristics of		Characteristics of		
Year	identified articles: study	Characteristics of identified	identified articles:		Main efficacy
(Quality)	designs	articles: populations	interventions	Data synthesis methods	outcome
	-		interventions Anticonvulsants (10 trials), antidepressants (4 trials),		outcome Primary outcome was dichotomous information for 50% or moderate reduction of pain. Secondary outcomes were 30% reduction of pain and withdrawals related to

Drugs for Neuropathic Pain Page 15 of 200

Final Evidence Tables

Drug Effectiveness Review Project

Evidence Table 1. Systematic reviews of drugs for neuropathic pain

Author				Quality
Year				assessment
(Quality)	Main efficacy results	Main safety results	Results in subgroups	method
• • • • • • • • • • • • • • • • • • • •	Main efficacy results NNT (95% CI) to obtain one patient with more than 50% pain relief in neuropathic pain (all pain conditions combined): All antidepressants: 3.3 (2.9–3.8) TCA: 3.1 (2.7–3.7) SSRI: 6.8 (3.4–4.41) SNRI: 5.5 (3.4–14) DNRI: 1.6 (1.3–2.1) All anticonvulsants: 4.2 (3.8–4.8) carbamazepine: 2.0 (1.6–2.5) phenytoin: 2.1 (1.5–3.6) lamotrigine: 4.9 (3.5–8.1) valproate: 2.8 (2.1–4.2) gape tin, pregabalin: 4.7 (4.0–5.6) topiramate: 7.4 (4.3–28) dextromethorphan: 4.4 (2.7–12) topical lidocaine: 4.4 (2.5–17)	Main safety results NNH (95% CI) to obtain one withdrawal due to adverse effects (all pain conditions combined): All antidepressants: 16.0 (12–25) TCA: 14.7 (10–25) SSRI: NS SNRI: NS DNRI: NS All anticonvulsants: 10.6 (9–13) carbamazepine: 21.7 (13–79) phenytoin: NS lamotrigine: NS valproate: NS gabapentin, pregabalin: 17.8 (12–30) topiramate: 6.3 (5–8) dextromethorphan: 8.8 (6–21) topical lidocaine: NS	N/A	Jadad score

Drugs for Neuropathic Pain Page 16 of 200

Author Year (Quality)	Main efficacy results	Main safety results	Results in subgroups	Quality assessment method
Hempenstall, 2005 (7)	NNT (95% CI) from studies with dichotomous data available: Tricyclic antidepressants: 2.64 (2.1–3.54) gabapentin: 4.39 (3.34–6.07) pregabalin: 4.93 (3.66–7.58) dextromethorphan: NS topical lidocaine: 2.00 (1.43–3.31)	NNH (95% CI) for withdrawals due to adverse events, from studies with dichotomous data available: Tricyclic antidepressants: 16.9 (8.85—178) gabapentin: 12.25 (7.69—30.2) pregabalin: NS dextromethorphan: 3.8 (2.09—21.3) topical lidocaine: NS	N/A	Jadad score

Drugs for Neuropathic Pain Page 17 of 200

Author Year (Quality)	Main efficacy results	Main safety results	Results in subgroups	Quality assessment method
Saarto, 2005 (Cochrane Review) (4)	Tricyclic antidepressants: NNT (95% CI) vs placebo for global improvement or pain relief, at least moderate improvement: amitriptyline: 2 (1.7–2.5) desipramine: 2.1 (1.5–3.2) imipramine: similar NNT but few participants and result not significant. RR for tricyclic antidepressants combined: 2.37 (95% CI 1.96 to 2.87) SSRIs: Data insufficient to calculate NNT. 4 placebo controlled studies included; all found SSRI superior to placebo (fluoxetine in idiopathic facial pain and in diabetic neuropathy, citalopram in diabetic nephropathy, paroxetine and sertraline in burning mouth syndrome)	NNH (95% CI) for withdrawals due to adverse effects for tri- and tetracyclic antidepressants: 16 (10—45) For other antidepressants, no statistically significant difference compared to placebo.	Where data were available, subgroup analyses were performed by neuropathic disorder, antidepressant, and different classes of antidepressant and individual drugs (tricyclic antidepressants, SSRIs)	Oxford quality scale (Jadad 1996) & 4 point grade scale defined in the Cochrane reviewers handbook for allocation concealment
Wiffen, 2005 (Gabapentin, Cochrane Review)	NNT for improvement, all trials combined: 4.3 (95% CI 3.5 to 5.7); relative risk 2.2 (95% CI 1.8 to 2.7); 42% of participants improved on gabapentin compared to 19% on placebo. NNT for improvement in diabetic nephropathy 2.9 (95% CI 2.2 to 4.3); relative risk 2.2 (95% CI 1.7 to 3.0); 64% of participants improved on gabapentin compared to 28% on placebo. NNT for improvement in post-herpetic neuralgia: 3.9 (95% CI 3.0 to 5.7); relative risk 2.5 (95% CI 1.8 to 3.3); 43% of participants improved on gabapentin compared to 17% on placebo.	NNH for withdrawal due to adverse effects NS. Frequencies: dizziness 24%, somnolence 20%, headache 10%, diarrhea 10%, confusion 7%, nausea 8%.	N/A	Jadad score

Drugs for Neuropathic Pain Page 18 of 200

Drug Effectiveness Review Project

Evidence Table 1. Systematic reviews of drugs for neuropathic pain

Author Year (Quality)	Main efficacy results	Main safety results	Results in subgroups	Quality assessment method
Wiffen, 2005	NNT for at least moderate pain relief in any neuropathic pain 2.5 (95% CI 1.8 to 3.8) Relative benefit 2.1 (95% CI 1.5 to 2.7) Trigeminal neuralgia NNT for pain relief: 1.9 (95% CI 1.4 to 2.8). Relative benefit NS (based on 3 studies with 47 participants) Diabetic neuropathy Placebo-controlled trial (N=30): 30% to 50% more patients improved on carbamazepine vs placebo. Carbamazepine vs nortriptyline: NSD Post-herpetic neuralgia carbamazepine plus clomipramine superior to transcutaneous electronic nerve stimulation Post-stroke pain NNT vs placebo NS; No difference between carbamazepine and amitriptyline (OR 3.3; 95% CI 0.8 to 13.8).	NNH for withdrawals due to AEs NS. NNH for minor harm 3.7 (95% CI 2.4 to 7.8)	N/A	Jadad score

Drugs for Neuropathic Pain Page 19 of 200

Author Year (Quality)	Main efficacy results	Main safety results	Results in subgroups	Quality assessment method
Khaliq, 2007 Topical Lidocaine, Cochrane Review (6)	Primary outcome: mean improvement in pain relief as derived from 2 studies indicate that topical lidocaine was better than placebo for pain relief. The combined weighted mean difference from these two trials was 0.42 (95%CI 0.14-0.69, P=0.003).	2 trials reported this outcome. One trial reported 12 adverse reactions in both groups, while the other reported 2 adverse reactions in active group and 1in placebo group. None of the participants dropped out of the study due to adverse reactions. Adverse skin reactions could also be due to the use of patch, as opposed to lidocaine itself. There were no reported cardiovascular, respiratory and neurological adverse reactions.	N/A	Quality assessment took into account 7 criteria. Allocation concealment was graded according to criteria presented in Cochrane's review writing software, RevMan 4.2

Drugs for Neuropathic Pain Page 20 of 200

Drug Effectiveness Review Project

Evidence Table 1. Systematic reviews of drugs for neuropathic pain

Author Year (Quality)	Main efficacy results	Main safety results	Results in subgroups	Quality assessment method
Wiffen (lamotrigine), Cochrane review (6)	Central post stroke pain (n=30) Statistically significant difference between lamortigine and placebo. RR was 4 (1.3 to 12.6), NNT was 3 (1.8 to 9) Diabetic neuropathy (n=59) NNT for global impression of "highly effective" was not significant. A 50% reduction of pain was achieved by more people taking lamotrigine than placebo (RR not significant), for global impression of moderate or better improvement RR 1.7 (0.97 to 3 (NS), NNT 3 (2 to 59, NS) HIV related neuropathy: Mean difference in pain score Placebo -0.18 (0.09), Lamotrigine -0.55 (0.14). Significantly greater fall in pain scores in the tx group, but over half of this group dropped out. Intractable neuropathic pain (n=100): A calculated NNT was not Statistically significant. Spinal cord injury related pain (n=30): No significant effects on pain intensity. Trigeminal neuralgia: (n=14): Lamotrigine was slightly more effective than placebo (RR not significant)	7% of participants developed a rash	HIV related neuropathy: n=227. Subgroups of patients receiving antiretroviral therapy (ART). ART group had an RR of 2.0 (1.1 to 3.6 (SSD); an NNT of 4.3 (2.3 to 37). The non ART RR was 1.3 (0.94 to 1.9 (NS), and NNT was not significant.	Oxford quality scale (Jadad 1996)

Drugs for Neuropathic Pain Page 21 of 200

Author Year				Quality assessment
Quality)	Main efficacy results	Main safety results	Results in subgroups	method
Wong, 2007 (5)	to 3.77), with duloxetine 120mg, OR was 2.10 (1.03-4.27)	21 studies are included in the meta analysis of withdrawals related to adverse effects (AE). Traditional anticonvulsants: pooled OR for withdrawal related to AE was 1.51 (0.33 to 6.96) Newer generation anticonvulsants: Pooled OR for withdrawal related to AE was 2.98 (1.75 to 5.07) Pregabalin: The OR for withdrawal related to AE was 2.81(1.13 to 7.04) for 600 mg daily and 2.23 (0.68 to 7.26) for pregabalin 300 mg daily. Antidepressants: The pooled OR for AE related to withdrawal was 2.32 (0.59 to 9.69) SNRIs: Pooled OR for withdrawal related to AE was 2.36 (1.05-5.35) for 60 mg duloxetine, and 4.65 (2.18-9.94) for 120 mg duloxetine.	N/A	Jadad score

Drugs for Neuropathic Pain Page 22 of 200

Author	
Year	
(Quality)	Limitations of primary studies
Finnerup, 2005 (5)	

Drugs for Neuropathic Pain Page 23 of 200

Author	
Year	
(Quality)	Limitations of primary studies
Hempenstall,	In 14 studies there were no reference to ITT
2005	analysis. In these studies, % of non completers
(7)	varied between 1% and 24%.

Drugs for Neuropathic Pain Page 24 of 200

Author	
Year	
	Limitations of primary studios
(Quality)	Limitations of primary studies
Saarto, 2005 (Cochrane Review) (4)	Many reports gave insufficient information, used a variety of different outcome measures and variable dosing. The quality of reporting in recent trials remains disappointing, in particular insufficient details are provided to enable effectiveness to be assessed.
Wiffen, 2005 (Gabapentin, Cochrane Review)	Authors say that the usefulness of primary studies would be increased greatly by improvements in the quality of reporting. Investigators presenting mean data for treatment and control should also consider the presentation of categorical and binary data.

Drugs for Neuropathic Pain Page 25 of 200

Limitations of primary studies
Poor quality reporting limited the ability to combine data. Many reports gave insufficient information, used a variety of different outcome measures and variable dosing. Although contacted by letter, all the authors did not reply and those who did often did not have data available. No. of participants in trials is small.

Drugs for Neuropathic Pain Page 26 of 200

A 41	
Author	
Year	
(Quality)	Limitations of primary studies
Khaliq, 2007 Topical Lidocaine, Cochrane Review (6)	Only a small number of studies on topical lidocaine have been performed. Different outcome measures have been used between the various studies, so there is very little data to combine efficacy. One study was only published as an abstract and the actual paper has not been through a peer review and remains unpublished. All the three studies showed modest efficacy on pain relief. The unpublished trial had no statistical difference between VAS scores. All the trials have been written by the same first author. Shortcomings in trial designs: studies assessed patients' reports of pain using subjective assessments. In one of the trials, allocation concealment was not mentioned, none of the trials stated the effectiveness of blinding

Drugs for Neuropathic Pain Page 27 of 200

Author	
Year	
(Quality)	Limitations of primary studies
Wiffen	Most of the studies were small and only 1 study
(lamotrigine),	had more than 100 participants. This together
Cochrane	with the fact that generally there is only one
review	study for each condition means that results show
(6)	weak evidence to support the effect of
	lamotrigine. None of the studies used allocation
	concealment.

Drugs for Neuropathic Pain Page 28 of 200

Limitations of primary studies
Sample size was small and some trials used a cross over design without a washout period resulting in a carry over effect. Treatment period was less than 6 months in all of these studies, so the long term effect of these drugs cannot be judged. Few studies reported treatment efficacy for different types of pain such as allodynia and burning pain.

Drugs for Neuropathic Pain Page 29 of 200

Study	Searches through	1. Search methods reported?	2. Comprehensive search?	3. Inclusion criteria reported?	4. Selection bias avoided?	5. Validity criteria reported?	6. Validity assessed appropriately?
Finnerup, 2005 Algorithm for neuropathic pain treatment	April 2005	Yes	Yes	Yes	No- only reports numbers meeting selection criteria, no information on exclusion	Yes (Jadad)	Yes
Hempenstall, 2005 Analgesic therapy in postherpetic neuralgia	October 2004	Yes	Yes	Yes	Yes	Yes	Yes (excluded if Jadad score less than 3 or if 10 patients or less)
Khaliq, 2007 Topical lidocaine for postherpetic neuralgia (Cochrane Review)	November 2006	Yes	Yes	Yes	Yes	Yes	Yes; discussion of qualtiy in the text and presented in the Ets
Saarto, 2005 Antidepressants for neuropathic pain (Cochrane Review)		Yes	Yes	Yes	Yes	Yes	No- no analysis based on validity assessment
Wiffen, 2005 Carbamazepine for acute and chronic pain (Cochrane Review)		Yes	Yes	Yes	Yes	Yes	No: Jadad score reported in evidence table but not discussed

Drugs for Neuropathic Pain Page 30 of 200

Study	Searches through	1. Search methods reported?	2. Comprehensive search?	3. Inclusion criteria reported?	4. Selection bias avoided?	5. Validity criteria reported?	6. Validity assessed appropriately?
Wiffen, 2005 Gabapentin for acute and chronic pain (Cochrane Review)	November 2004	Yes	Yes	Yes	Yes	Yes	No: Jadad score reported in evidence table but not discussed
Wiffin, 2007 Lamotrigine for acute and chronic pain	Aug 2006	Yes	Yes	Yes	Yes	Yes	Yes, reported in evidence tables although little discussion in text
Wong, 2006 Treatment of painful diabetic neuropathy	October 2006	Yes	Yes	Yes	Yes	Yes (Jadad)	Partial

Drugs for Neuropathic Pain Page 31 of 200

Study	7. Methods used to combine studies reported?	8. Findings combined appropriately?	9. Conclusions supported by data?	10. Overall scientific quality (score 1-7; higher is better)
Finnerup, 2005 Algorithm for neuropathic pain treatment	Yes	Yes	Yes	5
Hempenstall, 2005 Analgesic therapy in postherpetic neuralgia	Yes	Yes	Yes	7
Khaliq, 2007 Topical lidocaine for postherpetic neuralgia (Cochrane Review)	Used fixed effects model without explaining why	Yes	Yes	6
Saarto, 2005 Antidepressants for neuropathic pain (Cochrane Review)	Yes	Yes, except no sensitivity analysis by validity assessment	Overstated: "antidepressants are effective for a variety of neuropathic pains" although evidence is mainly in tricyclics and limited for SSRIs. Quality assessment of trials not addressed.	4
Wiffen, 2005 Carbamazepine for acute and chronic pain (Cochrane Review)	No- states only "meta- analysis was undertaken when appropriate data were available"	No, I2 very large but still combined without discussion		4

Drugs for Neuropathic Pain Page 32 of 200

Study	7. Methods used to combine studies reported?	8. Findings combined appropriately?	9. Conclusions supported by data?	10. Overall scientific quality (score 1-7; higher is better)
Wiffen, 2005 Gabapentin for acute and chronic pain (Cochrane Review)	No- states only "meta- analysis was undertaken when appropriate data were available"	Can't tell	Yes	4
Wiffin, 2007 Lamotrigine for acute and chronic pain	NA as only 1 study identifed for each comparison	NA	Yes	6
Wong, 2006 Treatment of painful diabetic neuropathy	Yes	Partial (combined different outcome measures, for some analyses combined different drugs)	Partial. Combined results for different drugs (newer anticonvulsants). Also draws conclusions about comparative efficacy based on informal indirect comparisons.	

Drugs for Neuropathic Pain Page 33 of 200

Evidence Table 3. Characteristics of RCTs of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/	
-	_	Sample size and characteristics	Intervention
Backonja	RCT	Painful diabetic neuropathy	Gabapentin
US	Parallel	N=165	3600 mg
	Multicenter		
Efficacy quality: Fair		Age	
		Mean (SD): 53.0	
			Placebo
		Male: 60%	
		Female: 40%	
Bone	RCT	Phantom limb pain	Gabapentin
2002	Crossover	,	2400 mg
UK and Ireland	Single Center	N=19	
			Placebo
Efficacy quality: Fair		Age	
Gilron (A)	RCT	Mixed	Gabapentin
2005	Crossover		3200 mg
Canada	Single Center	N=57	
Efficacy quality: Fair		Age	Lorazepam
		Mean (SD): 60 (pts PDN), 68 (pts PHN) Range: 40-81	1.6 mg
Gorson	RCT	Painful diabetic neuropathy	Gabapentin
1999	Crossover		900 mg
		N=40	
Efficacy quality: Fair			
		Age	Placebo
		Mean (SD): 62 (10.9) Range: 43-82□	
Hahn	RCT	HIV-related neuropathic pain	Gabapentin□
2004	Parallel		1200-2400 mg
Germany	Multicenter	N=26	
•			Placebo
Efficacy quality: Fair		Age	
Levendoglu	RCT	Spinal cord injury-related pain	Gabapentin

Drugs for Neuropathic Pain Page 34 of 200

Study	Design	Type of pain/	
		Sample size and characteristics	Intervention
2004	Crossover		3600 mg
Turkey		N=20	-
•		Age	
Efficacy quality: Fair		Mean (SD): 35.9 (9.8)	
, , ,			
		Male: 65% □	
		Female: 35%	Placebo
		1 diffaliation de 70	1 10000
Rice	RCT	Post-herpetic neuralgia	Gabapentin
2001	Parallel	1 oot herpette heardigia	1800 mg
UK	Multicenter	N=334	1000 mg
UK	iviuiticeritei	IN-334	
Efficacy avalles Esta		Ago	
Efficacy quality: Fair		Age	
		Mean (SD): 75.3	
		Range: 22.5-94.8	Gabapentin
			2400 mg
		Male: 41.32%	
		Female: 58.68%	

Drugs for Neuropathic Pain Page 35 of 200

Study	Design	Type of pain/		
		Sample size and characteristics	Intervention	
			Placebo	
			1.0000	
Rowbotham (D	RCT	Post-herpetic neuralgia	Gabapentin	
1998	Parallel		3600 mg	
US	Multicenter	N=225	Ü	
Efficacy quality: Fair		Age	Placebo	
, ,		Mean (SD): 74		
		Range: 39-90		
Serpell	RCT	Mixed	Gabapentin	
2002	Parallel			
UK and Republic of	Multicenter	N=305		
Ireland			Placebo	
		Age		
Efficacy quality: Fair		Mean (SD): 57		
Simpson (A) Part 1	RCT	Painful diabetic neuropathy	Gabapentin	
2001	Parallel		900-2700 mg	
US	Single Center	N=60		
Efficacy quality: Fair		Age		
		Mean (SD): 50.0	Placebo	
		Male: 60%		
		Female: 40%		
Tai	RCT	Spinal cord injury-related pain	Gabapentin	
2002	Crossover	Spirial Cold Injury-related palli	up to 1800 mg daily	
2002 US		N=7	up to 1000 flig daily	
US	Single Center	IN-1		
Efficacy quality: Poor		Age		

Drugs for Neuropathic Pain Page 36 of 200

	Sample size and characteristics Mean (SD): 35.9	Intervention
	Range: 27-48	
	Male: 85.71%	
	Female: 14.29%	
		Placebo
RCT	Radiculopathy	Gabapentin
Parallel	,	900 mg-3600 mg
	N=50	
		Placebo
	Age□	
RCT	Painful diabetic neuropathy	Gabapentin
Parallel		900-2700 mg
Single Center	N=60	
	Age	
	Mean (SD): 50.0	Placebo
	Female: 40%	
DCT	Post hornotic nouralgia	Pregabalin
	Fost-Herpetic Heuralgia	300-600 mg
	N=173	300-000 mg
widiliceriler	14-17-3	
	Ane	
	RCT	RCT Parallel RCT Parallel RCT Parallel N=50 Age Painful diabetic neuropathy N=60 Age Mean (SD): 50.0 Male: 60% Female: 40% RCT Parallel RCT Post-herpetic neuralgia

Drugs for Neuropathic Pain Page 37 of 200

Study	Design	Type of pain/	
		Sample size and characteristics	Intervention
		Mean (SD): 71.5 (10.9)	
			Placebo
		Male: 46.82%	
		Female: 53.18%	
		White: 94.8%	
		Asian: 1.2%	
Freynhagen	RCT	Mixed	Pregabalin
2005	Parallel		150-600 mg
Multiple European	Multicenter	N=338	
Efficacy quality: Fair		Age	Pregabalin
		Mean (SD): 62.2 (11.1)	600 mg
		Range: 26-87	
		Male: 54.14%	Placebo
		Female: 45.86%	
		White: 97.6%	
Lesser	RCT	Painful diabetic neuropathy	Pregabalin
2004	Parallel		75 mg
US	Multicenter	N=337	
Efficacy quality: Fair		Age	
		Mean (SD): 59.9 (10.5)□	
		Range: 26-85□	Pregabalin
			300 mg
		Male: 59.94%	
		Female: 40.06%	
		White: 94.4%□	
		Black: 3.6% □	Pregabalin
		Other: 2.1%	600 mg

Drugs for Neuropathic Pain Page 38 of 200

Study	Design	Type of pain/	
		Sample size and characteristics	Intervention
			Placebo
Richter 2005 US	RCT Parallel Multicenter	Painful diabetic neuropathy N=246	Pregabalin 150 mg
Efficacy quality: Fair		Age Mean (SD): 57.1 Male: 60.57% Female: 39.43%	Pregabalin 600 mg
		White: 83.7% Black: 7.7% Hispanic: 7.3% Other: 1.2%	Placebo
Rosenstock 2004 US	RCT Parallel Multicenter	Painful diabetic neuropathy N=146	Pregabalin 300 mg
Efficacy quality: Fair		Age Mean (SD): 59.7 (11.4) Male: 56.16% Female: 43.84%	Placebo
Sabatowski 2004 Multiple European and Australia□	RCT Parallel Multicenter	Post-herpetic neuralgia N=238	Pregabalin 150 mg

Drugs for Neuropathic Pain Page 39 of 200

Study	Design	Type of pain/	
		Sample size and characteristics	Intervention
		Age	Pregabalin
Efficacy quality: Fair		Mean (SD): 72.1	300 mg
		Range: 32-96	
		Male: 44.96%	Placebo
		Female: 55.04%	
		Race/ethnicity	
		White: 99.2%	
Siddall	RCT	N=137	Pregabalin 150-600 mg (flexible
2006		Age: Mean 50 (range 21-80)	dose)
Australia	Parallel	Male: 83%	mean dose 460 mg
		Female: 17%	
Efficacy quality: Fair	Multicenter	97.1% white	Placebo
van Seventer	RCT	Post-herpetic neuralgia	Pregabalin□
2006	Parallel		150 mg
US and Multiple	Multicenter	N=368	
European			
		Age	Pregabalin
Efficacy quality: Fair		Mean (SD): 70.7 (10.6)	300 mg
		Range: 18-92	
		Male: 45.65%	Pregabalin
		Female: 54.35%	300-600 mg
		1 chiale. 04.0070	555-556 mg
		White: 98.9%	
		Black: 0.5%	Placebo

Drugs for Neuropathic Pain Page 40 of 200

Study	Design	Type of pain/	
		Sample size and characteristics	Intervention
		Other: 0.5%	
Goldstein	RCT	Painful diabetic neuropathy	Duloxetine
2005	Parallel	,	20 mg daily
US	Multicenter	N=457	g,
Efficacy quality: Fair		Age Mean (SD): 60.1 (10.9)	Delevation
		NA 1 04 400/	Duloxetine
		Male: 61.49% Female: 38.51%	60 mg daily
		White: 77.2% Black: 8.1%	
		Hispanic: 11.2%	Duloxetine
		Other: 3.5%	60 mg BID
			Total daily dose: 120 mg/d
			Placebo
Raskin (B) 2005 and	RCT	Painful diabetic neuropathy	Duloxetine
2006	Parallel	,	60 mg once daily
2005 US	Multicenter	N=348	Total daily dose: 60 mg
		Age	
Efficacy quality: Fair		Mean (SD): 58.8 (10.1)	
		, , , , ,	Duloxetine
		Male: 46.55%	60 mg twice daily
		Female: 53.45%	Total daily dose: 120 mg

Drugs for Neuropathic Pain Page 41 of 200

Study	Design	Type of pain/		
		Sample size and characteristics	Intervention	
		White: 99.7% Asian: 0.3%		
			Placebo	
Wernicke 2006	RCT Parallel	Painful diabetic neuropathy	Duloxetine□ 60 mg once daily	
US	Multicenter	N=334	of fing office daily	
Efficacy quality: Fair		Age Mean (SD): 60.7 (10.6) Male: 61.08% Female: 38.92% Race/ethnicity White: 78.1% Black: 3.3%□ Hispanic: 16.2% Other: 2.4%	Duloxetine□ 60 mg twice daily Total daily dose: 120 mg Placebo	
Rowbotham (C) 2004 US	RCT Parallel Multicenter	Painful diabetic neuropathy N=244	Venlafaxine 75 mg daily	
Efficacy quality: Fair		Age Mean (SD): 59.0	Venlafaxine 150-225 mg daily	
		Male: 59.43% Female: 40.57%	Placebo	

Drugs for Neuropathic Pain Page 42 of 200

Study	Design	Type of pain/ Sample size and characteristics	Intervention
Tasmuth 2002 Finland	RCT Crossover Single Center	Cancer-related neuropathic pain N=13	Venlafaxine 37.5 mg
Efficacy quality: Fair		Age Mean (SD): 55 Range: 37-72	Venlafaxine 75 mg
		Male: 0% Female: 100%	Placebo
			Placebo
Yucel 2005	RCT Parallel	Mixed	Venlafaxine
Turkey	Single Center	N=55	75 mg Venlafaxine
Efficacy quality: Fair		Age Mean (SD): 50.3	150 mg
		Male: 29.09%	Placebo
Estanislao 2004 US	RCT Crossover Multicenter	HIV-related neuropathic pain N=64	Lidocaine gel 5%
Efficacy quality: Fair		Age Mean (SD): 45	Placebo
Rowbotham (A) 1995 US	RCT Crossover Single Center	Type of pain studied □ Post-herpetic neuralgia □	Lidocaine gel 5%
	J	N=39□	Placebo

Drugs for Neuropathic Pain Page 43 of 200

Design	Type of pain/	
	Sample size and characteristics	Intervention
r		
	Age□	
RCT	Post-herpetic neuralgia	Lidocaine transdermal patch
Parallel		
Multicenter	N=96	
OF .	Age Mean (SD): 74	Placebo
	Male: 37.5%	
RCT	Post-herpetic neuralgia	Lidocaine transdermal patch
Crossover	,	
Multicenter	N=32	Placebo
DOT	Missaul	lida asina tranada mada natah
	Wilked	Lidocaine transdermal patch 5%
	N=58	0.70
		Placebo
	Age	
RCT	Post-herpetic neuralgia	Lidocaine transdermal patch
Crossover		5%; up to 3 patches to cover area
Single Center	N=35	Placebo
	RCT Parallel Multicenter RCT Crossover Multicenter RCT Crossover Multicenter RCT Crossover Multicenter	Sample size and characteristics Age RCT Parallel Multicenter Age Mean (SD): 74 Male: 37.5% RCT Crossover Multicenter N=32 RCT Crossover Multicenter N=58 Age RCT Crossover Multicenter RCT Crossover Multicenter N=58 Age RCT Crossover Multicenter RCT Crossover Multicenter N=58 Age RCT Crossover RCT Crossover Multicenter N=58 Age RCT Crossover

Drugs for Neuropathic Pain Page 44 of 200

Study	Eligibility	Exclusion
Backonja	At screening, pain attributed to diabetic neuropathy	Presence of other severe pain that could confound
US	for 1 to 5 years, a diagnosis of diabetes mellitus	assessment or self-evaluaiton of the pain due to diabetic
	(type 1 or 2), and a pain rating score of at least 40	neuropathy, receipt of any investigational drug within 30
Efficacy quality: Fair	mm on the 100-mm VAS of the Short-Form McGill	days prior to screening, and amputations other than toes.
	Pain Questionnaire. Patients with an average pain	Creatinine clearance of less than 60 mL/min.
	score of at least 4 on an 11-point Likert scale and a	t l
	least 4 observations recorded in daily pain diaries	
	over the next week were randomized. Only	
	paitents with a hemoglobin A1c level of 0.11 or less	
Bone	Patients attending a Disablement Services Clinic,	Coexisting epilepsy or a known allergy to gabapentin,
2002	with established phantom limb pain of a minimum	significant hepatic or renal insufficiency, severe hematologic
UK and Ireland	of 6 months duration after a previous surgical	disease, a history of illicit drug or alcohol abuse, any serious
	amputation, between age 18 and 75 years, and had	psychiatric conditon, and other severe pain that could
Efficacy quality: Fair	a pain score of at least 40 mm on a 100-mm VAS.	confound the assessment.
Gilron (A)	Diabetic nephropathy or postherpetic neuralgia.	Hypersensitivity to study medications, another painful
2005	Patients with diabetic nephropathy had distal,	condition as severe as the diabetic neuropathy or
Canada	symmetric, sensory diabetic polyneuropathy as	postherpetic neuralgia, recent MI, unstable angina or
	· ·	congestive heart failure, any central neurologic disorder
Efficacy quality: Fair	either an unequivocal decrease in response to	(including seizures), a serious mood disorder, a history of
	pinprick, temperature, or vibration in both feet or	serious drug or alcohol abuse, pregnancy, lactation, and
	bilaterally decreased or absent ankle-jerk reflexes.	lack of a primary care physician.
_	Patients with post-herpetic neuralgia had an	
Gorson	Painful diabetic neuropathy and 1) diabetes for at	Diabetes and chronic renal insufficiency, painful diabetic
1999	least 6 months on a stable dosage of insulin or oral	
L	hypoglycemic agent, 2) distal symmetric	vascular disease, another painful condition, or other cause
Efficacy quality: Fair	sensorimotor neuropathy as shown by impaired pin	for neuropathy.
	prick, temperature, or vibration sensation in both	
	feet and absent or reduced ankle reflexes, and 3)	
	daily neuropathic palin in the acral extremities, of at	
	least moderate severity, for over 3 months that	
Hahn	Symptoms of painful HIV-associated sensory	Pregnant or taking tricyclic or tetracyclic antidepressants,
2004	neuropathy, diagnosed by a neurologist based on	other anticonvulsants, topical capsaicin, mexiletine, alpha-
Germany	history, as well as clinical and neurophysiological	liponic acid, systemic corticosteroids or immune modulators,
E#:	examination, gave informed written consent, aged	central analgesics or had received nerve blocks or
Efficacy quality: Fair	18 years or over and completed a baseline pain	acupuncture. Alternative causes for neuropathy (i.e.,
Levendoglu	Paraplegic patients with complete traumatic spinal	Severe cognitive impairment, pregnancy, seizure disorder,

Drugs for Neuropathic Pain Page 45 of 200

Study	Eligibility	Exclusion
2004	cord injury at the thoracic and lumvar level, aged	use of anticonvulsants and antidepressants, major
Turkey	between 20 and 65 years, with neuropathic pain for more than 6 months confirmed by a physician.	depression or a score above 16 on the Beck Depression Inventory, and hypersensitivity to gabapentin.
Efficacy quality: Fair	, , , , , , , , , , , , , , , , , , ,	and the second s
Rice 2001 UK	Men and women aged at least 18 years, of any race. Nonpregnant (using barrier or hormonal contraception where appropriate), nonlactating,	Failure to respond to previous treatment with gabapentin at >=1200 mg/day, failure to respond to gabapentin at any dose level due to side effects or contraindication to
Efficacy quality: Fair	postmenopausal or surgically sterilized. Pain had to have been present for more than 3 months after	gabapentin treatment.
	the healing of the acute herpes zoster skin rash. Average pain scores of 4 or more, based on an 11-point Likert scale, on the week before commencing study medication.	

Drugs for Neuropathic Pain Page 46 of 200

Study	Eligibility	Exclusion
Rowbotham (D	At least 18 years of age, pain present for more than	Prior treatment with gabapentin or demonstrated
1998	3 months after healing of a herpes zoster skin rash;	hypersensitivity to the drug or its ingredients, neurolytic or
US	a pain intensity score of at least 40 mm on the 100-	neurosurgical therapy for postherpetic neuralgia,
	mm VAS on the Short-Form McGill Pain	immunocompromised state, significant hepatic or renal
Efficacy quality: Fair	Questionnaire at screening and randomization;	insufficiency, significant hematological disease, severe pain
	average daily diary pain score of at least 4 (on a	other than that caused by postherpetic neuralgia, use of
0 "	scale of 0-10) during the baseline week, and	experimental drugs or participation in a clinical study within
Serpell		Failure to respond to previous treatment with gabapentin at
2002	Required to have a definite diagnosis of	>=900 mg/day or failure to respond to gabapentin at any
UK and Republic of Ireland	neuropathic pain, made and confirmed by an experienced, practicing chronic pain specialist and	dose level due to side effects; known creatinine clearance <=60 ml/min or known renal impairment; clinically significant
literatio	based on clinical ground of history, examination,	hepatic, respiratory, hematological illnesses or unstable
Efficacy quality: Fair	and appropriate investigation of symptoms and	cardiovascular disease; significant neurological or
Simpson (A) Part 1	Part 1: Pain attributed to diabetic neuropathy for 3	Part 1: Severe pain other than that attributed to diabetic
2001	months to 1.5 years, a diagnosis of diabetes	neuropathy, amputations other than toes, and renal failure
US	mellitus from 6 months to 17 years, a pain score of	with a creatinine clearance of less than 60 mL/min. The
	at least 40 mm on the 100-mm VAS of the Short-	following medications taken within 30 days before
Efficacy quality: Fair	Form McGill Pain Questionnaire, and an average	screening: tricyclic antidepressants, mexiletine,
	score of 4 on an 11-point Likert scale in daily pain	carbamazepine, phenytoin, valproate, dextromethorphan,
	diaries over the next week. □	opioids, capsaicin, NSAIDs, skeletal muscle relaxants,
	Part 2: patients from the gabapentin-treated group	benzodiazepines, and over the counter centrally acting
	in Part 1 who had minimal improvement/no change	agents.
- ·	or worse as determined by the Patient Global	
Tai	Traumatic spinal cord injury, age 18 to 85 years,	Severe cognitive impairment, pregnancy, seizure disorder,
2002 US	neuropathic pain confirmed by a spinal cord injury	major depression or a score >16 on the Beck Depression
03	physician, and traumatic injury for greater than 30 days. Score of >4 on the 11-point Neuropathic	Inventory, known hypersensitivity to gabapentin, and renal insufficiency with a creatinine clearance less than 60
Efficacy quality: Poor	Pain Scale.	mL/minute. A score of >16 on Beck Depresion Inventory.
Emoacy quality. FOOI	i ain ocaic.	In Emiliate. A score of a founded bepresson inventory.

Drugs for Neuropathic Pain Page 47 of 200

Study	Eligibility	Exclusion	
Yildirim 2003	Not reported. Chronic pain and nerve impairment	Contraindications to gabapentin treatment, severe	
Turkey	were the main symptoms of the patients under study.	depression, severe nephropathy, chronic alcoholism, pregnancy, and spinal surgery; coexistence of another type	
Turkey	Study.	of pain.	
Efficacy quality: Fair		'	
Simpson (A) Part 1	Part 1: Pain attributed to diabetic neuropathy for 3	Part 1: Severe pain other than that attributed to diabetic	
2001	months to 1.5 years, a diagnosis of diabetes	neuropathy, amputations other than toes, and renal failure	
US	mellitus from 6 months to 17 years, a pain score of at least 40 mm on the 100-mm VAS of the Short-		
Efficacy quality: Fair	Form McGill Pain Questionnaire, and an average	following medications taken within 30 days before screening: tricyclic antidepressants, mexiletine,	
Emodely quanty. I am	score of 4 on an 11-point Likert scale in daily pain	carbamazepine, phenytoin, valproate, dextromethorphan,	
	diaries over the next week. □	opioids, capsaicin, NSAIDs, skeletal muscle relaxants,	
	Part 2: patients from the gabapentin-treated group	benzodiazepines, and over the counter centrally acting	
	in Part 1 who had minimal improvement/no change	agents.	
D 1:	or worse as determined by the Patient Global		
Dworkin 2003	Men and women of any race who were at least 18	Pregnant or lactating women, serious or unstable medical	
US	years of age and had postherpetic neuralgia defined as pain present for more than 3 months	conditions, other severe pain that might confound assessment or self-evaluation of pain due to post-herpetic	
	after healing of a herpes zoster skin rash. Pain at	neuralgia, or previous neurolytic or neurosurgical therapy	
Efficacy quality: Fair		for postherpetic neuralgia; patients who had failed to	

Drugs for Neuropathic Pain Page 48 of 200

Final Evidence Tables

Drug Effectiveness Review Project

Evidence Table 3. Characteristics of RCTs of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Eligibility	Exclusion
diaries and had a minimum mean daily pain rating of 4 on an 11-point numerical pain rating scale during the baseline week preceding randomization; women had to practice an appropriate method of	respond to previous postherpetic neuralgia treatment with gabapentin at dosages >=1200 mg/day; baseline serum creatinine clearance <=30 ml/min, white blood cell count <2500/mm3, neurtrophil count <1500/mm3, or platelet cound <100X103/mm3; participation in any other clinical tria of an investigational drug within 30 days before screening.
Men and non-pregnant, non-lactating women >=18 years of age with a primary diagnosis of painful diabetic peripheral neuropathy (type 1 or 2 diabetes mellitus with HbA1c <=11% and painful, distal, symmetrical, sensorimotor polyneuropathy for >=6 months) or postherpetic neuralgia (pain present for >=3 months after healing of the herpes zoster skin rach). Also required to have a score of >=40 mm (0 mm=no pain, 100 mm=worst possible pain) on the	Any clinically significant or unstable medical or psychiatric condition. Malignancy within the past 2 years (with the exception of basal cell carcinoma) or an anticipated need for surgery during the study; patients with an abnormal ECG, creatinine clearance <60 mL/min, or abnormal hematology; patients who had abused illicit drugs or alcohol within the last 2 years; participated in a previous clinical trial for pregabalin or had taken any investigational drug or agent within 30 days prior to screening. History of hepatitis B or C or HIV infection, neurologic disorders, severe pain unrelated
at baseline and randomization. Men and women 18 or older with a diagnosis of	to primary diagnosis of postherpetic neuralgia or diabetic neuropathy, or any potentially sensation-altering skin HbA1c levels >11%, clinically significant or unstable hepatic.
type 1 or type 2 diabetes mellitus and distal symmetric sensorimotor polyneuropathy for 1 to 5 years. Female patients were required to be	respiratory, or hematiologic illnesses, unstable cardiovascular disease, or symptomatic peripheral vascular disease. Estimated creatinine clearance of <=60
nonpregnant, nonlactating, postmenopausal, or surgically sterilized; women at risk of pregnancy were required to be using an appropriate method of contraception. Antidiabetic medication was to be stabilized prior to initiation of the study and held constant throughout the study, provided adequate glucose control was maintained to ensure patient safety. Patients must have completed at least 4 daily pain diaries during the baseline phase, and had to have an average baseline daily pain score of >=4 on a 0 to 10 scale. Score of >=40mm on the VAS of the Short-Form McGill Pain Questionnaire	mL/minute; any conditions that might confound pain assessment (for example, other severe pain or a skin condition in the area affected by neuropathy), patients who had failed to respond to previous treatment with gabapentin at doses >=1200 mg/day for treatment of pain associated with diabetic neuropathy.
	McGill Pain Questionnaire at baseline and randomization visits, completed at least 4 daily pain diaries and had a minimum mean daily pain rating of 4 on an 11-point numerical pain rating scale during the baseline week preceding randomization; women had to practice an appropriate method of contraception throughout the study, normal chest X Men and non-pregnant, non-lactating women >=18 years of age with a primary diagnosis of painful diabetic peripheral neuropathy (type 1 or 2 diabetes mellitus with HbA1c <=11% and painful, distal, symmetrical, sensorimotor polyneuropathy for >=6 months) or postherpetic neuralgia (pain present for >=3 months after healing of the herpes zoster skin rach). Also required to have a score of >=40 mm (0 mm=no pain, 100 mm=worst possible pain) on the VAS of the Short Form McGill Pain Questionnaire at baseline and randomization. Men and women 18 or older with a diagnosis of type 1 or type 2 diabetes mellitus and distal symmetric sensorimotor polyneuropathy for 1 to 5 years. Female patients were required to be nonpregnant, nonlactating, postmenopausal, or surgically sterilized; women at risk of pregnancy were required to be using an appropriate method of contraception. Antidiabetic medication was to be stabilized prior to initiation of the study and held constant throughout the study, provided adequate glucose control was maintained to ensure patient safety. Patients must have completed at least 4 daily pain diaries during the baseline phase, and had to have an average baseline daily pain score of >=40 nm 0 to 10 scale. Score of >=40 mm on the

Drugs for Neuropathic Pain Page 49 of 200

Study	Eligibility	Exclusion
Richter 2005 US Efficacy quality: Fair	Diabetes and painful distal symmetrical sensorimotor polyneuropathy for 1 to 5 years. Neuropathy was confirmed by history and detailed neurologic examination. Age >=18 years, HbA1c levels <=11%, and the ongoing experience of moderate to severe pain. Poorly controlled pain, including a score of >=40 mm on the VAS of the Short Form-McGill Pain Questionnaire and an average daily pain score of >=4 for 4 or more days during baseline (1 week).	Neurologic disorders unrelated to diabetic neuropathy, any condition that could confound study assesments, recent treatment with any investigational drug, or serious medical problems. Women could not be lactating and were required to have a negative pregnancy test result and to use appropriate contraception if of childbearing potential.
Rosenstock 2004 US Efficacy quality: Fair	Male or female patients of at least 18 years of age with type 1 or 2 diabetes mellitus who reported symmetrical painful symptoms in distal extremities for a period of 1-5 years prior to the study, and whose symptoms were attributable to sensorimotor diabetic peripheral neuropathy; a score of at least 40 mm on the 100-mm VAS of the Short-Form McGill Pain Questionnaire at baseline and randomization visits; completion of daily diaries (a minimum of four) during the week preceding	Pregnancy or lactation; serious or unstable medical conditions, including psychiatric disorders, certain conditions that cold confound evaluation of painful diabetic peripheral neuropathy, in particular, amputations other than toes, non-diabetic neurologic disorders and skin conditions affecting sensation in painful limbs. Baseline serum creatinine clearance <=60 ml.min, or if baseline WBC count was <2500/mm3, neutrophil count was <1500/mm3, or platelet count was <100 x 103/mm3. Failue to respond to previous treatment with gabapentin at doses of >=1200 mg/day for
Sabatowski	Age 18 years or older, pain present for more than 6	Active malignancy or any clinically significant respiratory,
2004		hematologic, hepatic, or cardiovascular disease. Failure to
	patients required to be non-pregnant, non-lactating	
Australia□	and either postmenopausal, surgically sterilized, or	with gabapentin at doses >=1200 mg/day or if they had

Drugs for Neuropathic Pain Page 50 of 200

Study	Eligibility	Exclusion
Efficacy quality: Fair	using an appropriate method of contraception. Needed to have completed at least 4 daily pain diaries during the 7 day baseline phase, with an average daily pain score >=4. Score >=40 mm on the 100 mm VAS of the Short-Form McGill Pain Questionnaire at baseline and randomization visits.	undergone neurolytic or neurosurgical therapy for postherpetic neuralgia. Skin condition or severe non-postherpetic neuralgia pain that might compromise evaluation of pain caused by postherpetic neuralgia. Creatinine clearance <=30 ml.min.
Siddall 2006 Australia Efficacy quality: Fair	Men or women at least 18 years of age with a spinal cord injury (paraplegia or tetraplegia) that had been incurred at least 1 year previously, in whom it had been nonprogressive for at least 6 months. Central neuropathic pain as defined by the IASP classification. Pain must have been chronic, having persisted continuously for at least 3 months or with relapses and remission for at least 6 months, and started after sustaining the spinal cord injury. Score of at least 40 mm on the 100 mm VAS of the SF-McGill Pain Questionnaire at both screening and randomization. Inpatients and outpatients eligible.	
van Seventer 2006 US and Multiple European Efficacy quality: Fair	Age >=18 years, pain for >3 months after healing of herpes zoster lesions, had a VAS pain score >=40 mm at baseline and at randomization, and had at least 4 daily pain diary entries with a mean daily pain score >=4 prior to randomization. III Malignancy (with the exception of basal cell carc within the past 2 years, WBC <2500 mm3, neutro <1500 mm3, or platelet count <100 x 103/mm3; or platelet count <100 x 10	

Drugs for Neuropathic Pain Page 51 of 200

Study	Eligibility	Exclusion	
Goldstein 2005 US Efficacy quality: Fair	Age 18+; daily pain due to polyneuropathy caused by Type 1 or Type 2 diabetes mellitus which was present for at least 6 months (pain had to begin in the feet with relatively symmetrical onset); minimun score of 4 on the 24-hour Average Pain Score (11-point Likert scale)	pain or skin conditions in the affected dermatome that could alter sensation or that might compromise postherpetic neuralgia assessment, or who had used prohibited DSM-IV criteria for Axis I diagnosis of MDD, depression-partial remission, dysthymic disorder, generalized anxiety disorder, alcohol or eating disorders as determined by the Mini International Neuropsychiatric Interview (MINI); current or historical DSM-IV diagnosis of mania, bipolar disorder, or psychosis as determined by the MINI; pain that could not be clearly differentiated from, or conditions that might interfere with, the assessment of the DPNP, such as peripheral vascular disease (ischemic pain); neurological disroders unrelated to diabetic neuropathy (e.g. phantom limb pain from amputation); skin condition in the area of the neuropathy that could alter sensation; other painful conditions; history of substance abuse or dependence within the past year or had positive urine drug screen, or received treatment within last 30 days; had taken excluded medications within 7 days of baseline; received treatment with a MAOI or fluxetine within 30 days of baseline, or used an opioid within 3 days of baseline	
Raskin (B) 2005 and 2006 2005 US Efficacy quality: Fair	Age 18 or older, presented with pain due to bilateral peripheral neuropathy caused by type 1 or type 2 diabetes. Pain had to begin in the feet and with relatively symmetrical onset.; Daily pain must have been present for at least 6 months, and diagnosis was to be confirmed by a score of at least 3 on the Michigan Neuropathy Screening Instrument. Mean score of 4 or greater when assessed for 24-hour average pain severity on the 11-point Likert scale	participation in the study. Current (within 1 year) DSM-IV Axis I diagnosis of major depressive disorder, dysthymia,	

Drugs for Neuropathic Pain Page 52 of 200

Study	Eligibility	Exclusion
	from patient diary prior to randomization, and stable glycemic control.	e neuroathy, history of substance abuse or dependence within previous year, positive urine drug screen for any substances of abuse or excluded medication, or history of a medical condition including pernicious anemia and hypothyroidism that could have been responsible for neuropathy, and treatment with a MAO inhibitor or fluoxetine within 30 days of randomization. Severe allergic reactions to multiple medications, and prior participation in a study of duloxetine.
Wernicke	Age 18 years or older and presented with diabetic	Pregnant or breastfeeding, previous renal transplant or
2006	peripheral neuropathic pain caused by type 1 or	current renal dialysis, or serious or unstable cardiovascular,
US	type 2 diabetes. Pain had to begin in the feet and	hepatic, renal, respiratory, or hematologic illness,
C#icacu avalitus Fair	with relatively symmetric onset. Daily pain must	symptomatic peripheral vascular disease, or other medical
Efficacy quality: Fair	have been present for at least 6 months, and the	conditions or psychological conditions that might tcompromise participation. Current (within 1 year) DSM-IV
	3 on the Michigan Neuropathy Screening	Axis I diagnosis of major depressive disorder, dysthymia,
	Instrument. Mean score of 4 or greater (between	generalized anxiety disorder, alcohol, or eating disorders, or
	Visit 2 and visit 3 before randomization), when	previous diagnosis or DSM-IV diagnosis of mania, bipolar
	assessed by 24-hour average pain severity on the	disorder, or psychosis, historical exposure to drugs knoown
	11-point Likert scale from the patient diary, stable	to cause neuropathy, history of substance abuse or
	glycemic control assessed by a physician	dependence within the previous year, positive urine drug
	investigator, and a HbA1c <=12%. Only paitents	screen for any substances of abuse or excluded medication,
	who were judged to be reliable and had an	or a history of a medical condition, including pernicious
		anemia and hypothyroidism or treatment with a MAO
	allowed them to communitcate intelligibly were included	inhibitor or fluoxetine within 30 days of randomization; severe allergic reactions to multiple medications and prior
	included	participation in a study of duloxetine.
Rowbotham (C)	18 years or older with metabolibally stable type 1 or	Clinically significant psychiatric disorders or a history of
2004		recent drug or alcohol abuse, as defined by the DSM-IV;
US	due only to diabetes and daily pain consistent with	major depressive disorder within 6 months of study initiation;
	bilateral distal peripheral neuropathy of at least	prestudy or baseline score of 13 or greater on the patient-
Efficacy quality: Fair	moderate severity for 3 months or longer. At	rated Beck Depression Inventory; total score greater than 9
	screening and during the baseline period, patients	(or greater than 3 on any single item) on the clinician-
	had to have a score of more than 40 mm on the	administered Raskin Depression Scale; history of seizure
	VAS-Pain Intensity (100-mm line scale, 0-100 mm).	
		hepatic disease; or clinically significant abnormalities in

Drugs for Neuropathic Pain Page 53 of 200

Eligibility	Exclusion	
	physical examination results, vital signs, ECG, or laboratory test results at the prestudy evaluations. Use of	
Neuropathic pain after treatment for breast cancer. Pain had to be in the anterior chest wall and/or axilla and/or median upper arm in an area with	Relapses or metastases of the breast cancer, clinically overt cardiac, renal, or hapatic disease, concomitant medication with MAO inhibitors or drugs that are significantly	
sensory disturbances. Pain had to be moderate in severity.	metabolized by the P4502D6 isoenzyme or which inhibit this enzyme.	
Aged between 20 and 70 years, having symptoms	Pain other than neuropathic pain, pain presumably of mixed	
compatible with neuropathic pain present for a	origin, previous hypersensitivity to venlafaxine, myocardial	
period longer than 6 months, a pain rating of at least 4 on a VAS (0-10) without medical treatment.	infarction experience in the prior 6 months or currently treated for angina pectoris, alcohol or drug addiction, bipolar	
	depressioin, and psychotic disorder, or receiving major depressive treatment with MAO inhibitors.	
HIV-associated distal symmetric polyneuropathy,	Causes of neuropathy other than HIV, received neurotoxic	
analogues. Diagnosis was made by a neurologist	drugs other than antiretrovirals, had skin lesions within the area of neuropathic pain, or had lidocaine allergy.	
feet for at least 2 weeks, rated on the Gracely pain scale as at least "mild" all the time or "moderate" fo	r .	
Pain present more than 1 month after healing of the Medical contraindications to topical local anesthetic		
zoster skin rash, had a well-defined area of	application, patients who had undergone neurolytic or	
painfully sensitive skin, and were in stable health.	neurosurgical therapy for postherpetic neuralgia.	
	Neuropathic pain after treatment for breast cancer. Pain had to be in the anterior chest wall and/or axilla and/or median upper arm in an area with sensory disturbances. Pain had to be moderate in severity. Aged between 20 and 70 years, having symptoms compatible with neuropathic pain present for a period longer than 6 months, a pain rating of at least 4 on a VAS (0-10) without medical treatment. HIV-associated distal symmetric polyneuropathy, with or without exposure to neurotoxic nucleoside analogues. Diagnosis was made by a neurologist based on: presence of pain or paresthesias in both feet for at least 2 weeks, rated on the Gracely pain scale as at least "mild" all the time or "moderate" for Pain present more than 1 month after healing of the zoster skin rash, had a well-defined area of	

Drugs for Neuropathic Pain Page 54 of 200

Study	Eligibility	Exclusion
Efficacy quality: Fair		
Galer (A) 2002 US	Established torso postherpetic neuralgia for at least 1 month and the presence of allodynia on physical examination.	Not reported.
Efficacy quality: Poor		
Galer (B)	All patients had been successfully treated with	Patients who reported they did not experience pain before
1999 ` ´	lidocaine patches on a regular basis for at least 1	patch application.
US	month. Subjects were recruited from postherpetic neuralgia patients who were enrolled in the open-	
Meier	Outpatients suffering from chronic peripheral focal	Another form of pain with greater or similar intensity,
2003	neuropathic pain syndromes, defined as damage to	previous nerve blockade or neurosurgery, or patients taking
Germany and	or dysfunction of the peripheral nervous system	topical products for pain relief or with ascertained
Switzerland	with positive spontaneous or evoked sensory signs	hypersensitivity to lidocaine or to amide-type anesthetics.
	with mechanical allodynia in the territories of	Injuries, inflammation, or insufficient wound healing of the
Rowbotham (B)	Postherpetic neuralgia, defined as pain present	Medical contraindications to topical local anesthetic
1996	more than 1 month after healing of the skin rash,	application, neurolytic or neurosurgical therapy for
US	and had a well-defined area of painfully sensitive	postherpetic neuralgia.
	(allodynic) skin on the torso or limbs; in stable	

Drugs for Neuropathic Pain Page 55 of 200

Study	Design	Intervention	Patient-reported pain
Backonja	RCT	Gabapentin	Average pain, 11-point Likert scale (0-10)
1999	Parallel	3600 mg	Mean score: 3.9 at 8 weeks (p<0.001)
US	Multicenter		
		N=84	
Efficacy quality: Fair			Average pain, SF-MPQ VAS (0-100)
			Mean score: 36.9 at 8 weeks (p<0.001)
			Average pain, Total SF McGill Pain
			Questionnaire (SF-MPQ)
			Mean score: 10.9 at 8 weeks (p<0.001)
			Pain intensity, SF-MPQ Present Pain Intensity (0-
			5)
			Mean score: 1.2 at 8 weeks (p<0.001)
		Placebo	Average pain, 11-point Likert scale (0-10)
			Mean score: 5.1 at 8 weeks
		N=81	
			Average pain, SF-MPQ VAS (0-100)
			Mean score: 53.8 at 8 weeks
			Average pain, Total SF McGill Pain
			Questionnaire (SF-MPQ)
			Mean score: 16.8 at 8 weeks
			Pain intensity, SF-MPQ Present Pain Intensity (0-
			5)
			Mean score: 1.8 at 8 weeks
Bone	RCT	Gabapentin	Pain intensity, Categorical (0-3; none, mild,
2002	Crossover	2400 mg	moderate, severe)
UK and Ireland	Single Center		Mean score: 1.45 at 6 weeks (p=0.80)□
		N=10	95% CI: 0.83, 2.07
Efficacy quality: Fair			Pain intensity, VAS (0-100)
			Mean score: 2.9 at 6 weeks (p=0.025)
			95% CI: 1.54, 4.26
		Placebo	Pain intensity, Categorical (0-3; none, mild,
			moderate, severe)
		N=9	Mean score: 1.6 at 6 weeks
			95% CI: 0.82, 2.38
			Pain intensity, VAS (0-100)
			Mean score: 5.1 at 6 weeks
			95% CI: 3.66, 6.54
Gilron (A)	RCT	Gabapentin	Average pain intensity (0-10), 10- cm VAS
2005	Crossover	3200 mg	Mean score: 3.5 at 5 weeks (p=NS)
Canada	Single Center		95% CI: 2.72, 4.28
		N=48	Average pain, Short-Form McGill Pain
Efficacy quality: FAIR			Questionnaire Total (0-45)
			Mean score: 10.7 at 5 weeks (p<0.05)
			95% CI: 8.15, 13.25
			Interference with activities, Brief Pain Inventory
			(General activity, 0-10)
			Mean score: 3.0 at 5 weeks (p<0.05)
			95% CI: 2.22, 3.78
			Pain intensity, Present pain intensity (0-3)
			Mean score: 1.64 at 5 weeks (p<0.05)
			95% CI: 1.33, 1.95
		Lorazepam	Average pain intensity (0-10), 10- cm VAS
		1.6 mg	Mean score: 3.9 at 5 weeks
			95% CI: 3.12, 4.68
		N=44	Average pain, Short-Form McGill Pain
			Questionnaire Total (0-45)
			Mean score: 14.4 at 5 weeks
			95% CI: 11.85, 16.95
			Interference with activities, Brief Pain Inventory
			(General activity, 0-10)
			Mean score: 4.5 at 5 weeks
			95% CI: 3.72, 5.28
1	1		

Study	Design	Intervention	Patient-reported pain
			Pain intensity, Present pain intensity (0-3)
			Mean score: 2.07 at 5 weeks
			95% CI: 1.76, 2.38
Gorson	RCT	Gabapentin	24-hour average pain score, VAS (0-10)
1999	Crossover	900 mg	Mean score: 1.8 at 6 weeks (p=0.42)
			95% CI: 1.58, 2.02
Efficacy quality: FAIR		N=19	Pain intensity, Present pain intensity (0-10)
			Mean score: 1.2 at 6 weeks (p=0.20)
			95% CI: 1.02, 1.38
			Pain relief, Moderate or excellent vs none or mild
			% of patients: 89.5% at 6 weeks (p=0.11)
			Pain, McGill Pain Questionnaire
			Mean score: 8.9 at 6 weeks (p=0.03)
			95% CI: 7.87, 9.93
		Placebo	24-hour average pain score, VAS (0-10)
			Mean score: 1.4 at 6 weeks
		N=21	95% CI: 1.27, 1.53
			Pain intensity, Present pain intensity (0-10)
			Mean score: 0.3 at 6 weeks
			95% CI: 0.09, 0.51
			Pain relief, Moderate or excellent vs none or mild
			% of patients: 42.9% at 6 weeks
			Pain, McGill Pain Questionnaire
			Mean score: 2.2 at 6 weeks
			95% CI: 1.26, 3.14
Hahn	RCT	Gabapentin	Pain, VAS (0-10)
2004	Parallel	1200-2400 mg	% change from baseline: -44.1% at 4 weeks
Germany	Multicenter		(p=NS)
,		N=15	,
Efficacy quality: Fair			Pain, VAS (0-10)
, and the same			Median score: 2.85 at 4 weeks (pNRvsplacebo)
		Placebo	Pain, VAS (0-10)
			% change from baseline: -29.8% at 4 weeks
		N=11	
			Pain, VAS (0-10)
			Median score: 3.3 at 4 weeks
Levendoglu□	RCT	Gabapentin	Pain intensity, Neuropathic Pain Scale (NPS)
2004□	Crossover	3600 mg	Pain intensity (0-10)
Turkey			Mean score: 4.8 at 4 weeks (p=0.000)
		N=20	95% CI: 4.32, 5.28
Efficacy quality: Fair			Pain intensity, NPS Pain Intensity (0-10)
			Mean score: 3.2 at 8 weeks (p=0.000)
			95% CI: 2.67, 3.73
			Pain, NPS cold (0-10)
			Mean score: 0.7 at 4 weeks (p=NS)
			95% CI: -0.13, 1.53
			Pain, NPS cold (0-10)
			Mean score: 0.8 at 8 weeks (p=NS)
			95% CI: -0.03, 1.63
			Pain, NPS deep (0-10)
			Mean score: 3.5 at 8 weeks (p=0.000)
			95% CI: 2.80, 4.20
			Pain, NPS deep (0-10)
			Mean score: 4.5 at 4 weeks (p=0.001)
			95% CI: 3.71, 5.29
			Pain, NPS dull (0-10)
			, ,
			Mean score: 0.3 at 8 weeks (p=NS)
			95% CI: -0.23, 0.83
			Pain, NPS dull (0-10)
			Mean score: 0.4 at 4 weeks (p=NS)
			95% CI: -0.13, 0.93

Study	Design	Intervention	Patient-reported pain
			Pain, NPS hot (0-10)
			Mean score: 2.7 at 8 weeks (p=0.001)
			95% CI: 1.82, 3.58
			Pain, NPS hot (0-10)
			Mean score: 3.9 at 4 weeks (p=0.001)
			95% CI: 2.67, 5.13
			Pain, NPS itchy (0-10)
			Mean score: 0.0 at 4 weeks (p=NS)
			95% CI: 0.00, 0.00
			Pain, NPS itchy (0-10)
			Mean score: 0.0 at 8 weeks (p=NS)
			95% CI: 0.00, 0.00
			Pain, NPS sensitive (0-10)
			Mean score: 0.5 at 8 weeks (p=NS)
			95% CI: -0.11, 1.11
			Pain, NPS sensitive (0-10)
			Mean score: 0.6 at 4 weeks (p=NS)
			95% CI: -0.06, 1.26
			Pain, NPS sharp (0-10)
			Mean score: 3.0 at 8 weeks (p=0.000)
			95% CI: 2.34, 3.66
			Pain, NPS sharp (0-10)
			Mean score: 4.6 at 4 weeks (p=0.000)
			95% CI: 3.77, 5.43
			Pain, NPS surface pain (0-10)
			Mean score: 2.8 at 8 weeks (p=0.001)
			95% CI: 2.58, 3.02
			Pain, NPS surface pain (0-10)
			Mean score: 3.9 at 4 weeks (p=0.001)
			95% CI: 2.72, 5.08
			Pain, NPS unpleasantness (0-10)
			Mean score: 3.6 at 8 weeks (p=0.000)
			95% CI: 3.03, 4.17
			Pain, NPS unpleasantness (0-10)
			Mean score: 4.8 at 4 weeks (p=0.000)
			95% CI: 4.36, 5.24
		Placebo	Pain intensity, Neuropathic Pain Scale (NPS)
			Pain intensity (0-10)
		N=20	Mean score: 7.8 at 4 weeks
			95% CI: 7.49, 8.11
			Pain intensity, NPS Pain Intensity (0-10)
			Mean score: 7.4 at 8 weeks
			95% CI: 7.09, 7.71
			Pain, NPS cold (0-10)
			Mean score: 0.8 at 8 weeks
			95% CI: -0.12, 1.72
			Pain, NPS cold (0-10)
			Mean score: 0.9 at 4 weeks
			95% CI: -0.11, 1.91
			Pain, NPS deep (0-10)
			. , ,
			Mean score: 6.2 at 8 weeks
			95% CI: 5.19, 7.21
			Pain, NPS deep (0-10)
			Mean score: 6.3 at 4 weeks
			95% CI: 5.29, 7.31
			Pain, NPS dull (0-10)
			Mean score: 0.6 at 4 weeks
			95% CI: -0.19, 1.39
			Pain, NPS dull (0-10)
•		1	Mean score: 0.6 at 8 weeks
<u>l</u>			
			95% CI: -0.19, 1.39
			95% CI: -0.19, 1.39

Study	Design	Intervention	Patient-reported pain
			Pain, NPS hot (0-10)
			Mean score: 5.2 at 8 weeks
			95% CI: 3.62, 6.78
			Pain, NPS itchy (0-10)
			Mean score: 0.0 at 4 weeks
			95% CI: 0.00, 0.00
			Pain, NPS itchy (0-10)
			Mean score: 0.0 at 8 weeks
			95% CI: 0.00, 0.00
			Pain, NPS sensitive (0-10)□
			Mean score: 0.8 at 8 weeks□
			95% CI: -0.08, 1.68
			Pain, NPS sensitive (0-10)□
			Mean score: 0.9 at 4 weeks□
			95% CI: 0.02, 1.78
			Pain, NPS sharp (0-10)□
			Mean score: 6.2 at 8 weeks□
			95% CI: 5.10, 7.30
			Pain, NPS sharp (0-10)□
			Mean score: 6.4 at 4 weeks□
			95% CI: 5.26, 7.54
			Pain, NPS surface pain (0-10)□
			Mean score: 5.3 at 4 weeks □
			95% CI: 3.77, 6.83
			Pain, NPS surface pain (0-10)□
			Mean score: 5.5 at 8 weeks□
			95% CI: 3.92, 7.08
			Pain, NPS unpleasantness (0-10)□
			Mean score: 7.3 at 8 weeks□
			95% CI: 6.77, 7.83
			Pain, NPS unpleasantness (0-10)□
			Mean score: 7.6 at 4 weeks□
			95% CI: 7.07, 8.13
Rice	RCT	Gabapentin	24-hour average pain score, Likert scale (0-10)
2001	Parallel	1800 mg	Mean score: 4.3 at 7 weeks (p<0.01)
UK	Multicenter	1000 mg	Wedit 30016. 4.3 at 7 Weeks (p 10.01)
UK	Mullicenter	N=115	Improvement Very much or much improved
Cfficacion accelitana Fain		N=115	Improvement, Very much or much improved ☐
Efficacy quality: Fair			% of patients: 41% at 7 weeks (p=0.003)
			Pain intensity, SF McGill Pain Present pain
			intensity (0-5)□
			Mean score: 1.9 at 7 weeks (p=NS)□
			95% CI: 1.70, 2.10
			Pain relief, 50% or greater reduction in mean
			pain score □
			% of patients: 32% at 7 weeks (p=0.001)
			Pain, SF McGill Pain Score Total (0-45)
			Mean score: 11.9 at 7 weeks (p<0.05)□
			95% CI: 10.29, 13.51
			Pain, SF McGill Pain VAS (0-100)□
			Mean score: 47 at 7 weeks (p=NS)
			" ,
		Cabanantin	95% CI: 41.88, 52.12
		Gabapentin	24-hour average pain score, Likert scale (0-10)
		2400 mg	Mean score: 4.2 at 7 weeks (p<0.01)
		N=108	Improvement, Very much or much improved□
			% of patients: 43% at 7 weeks (p=0.005)
			Pain intensity, SF McGill Pain Present pain
			intensity (0-5)□
			Mean score: 1.9 at 7 weeks (p=NS)□
			95% CI: 1.67, 2.13
			Pain relief, 50% or greater reduction in mean
			pain score ☐ % of patients: 34% at 7 weeks (p=0.001)

Study	Design	Intervention	Patient-reported pain
			Pain, SF McGill Pain Score Total (0-45)□
			Mean score: 12.5 at 7 weeks (p<0.05)□
			95% CI: 10.93, 14.07
			Pain, SF McGill Pain VAS (0-100)□
			Mean score: 46 at 7 weeks (p<0.05)□
			95% CI: 41.28, 50.72
		Placebo	24-hour average pain score, Likert scale (0-10) Mean score: 5.3 at 7 weeks
		N=111	
			Improvement, Very much or much improved % of patients: 23% at 7 weeks
			Pain intensity, SF McGill Pain Present pain intensity (0-5)□
			Mean score: 2.0 at 7 weeks□ 95% CI: 1.76, 2.24
			Pain relief, 50% or greater reduction in mean
			pain score □
			% of patients: 14% at 7 weeks
			Pain, SF McGill Pain Score Total (0-45)□
			Mean score: 13.7 at 7 weeks□
			95% CI: 11.93, 15.47
			Pain, SF McGill Pain VAS (0-100)□
			Mean score: 54 at 7 weeks□
			95% CI: 49.16, 58.84
Rowbotham (D)	RCT	Gabapentin	Average daily pain, Likert scale (0-10)□
1998	Parallel	3600 mg	Mean score: 4.2 at 8 weeks (p<0.001)□
US	Multicenter	a second	95% CI: 3.78, 4.62
		N=113	
Efficacy quality: Fair			Global Impression of Change, Moderately or
			much improved□
			% of patients: 43.2% at 8 weeks (p=NR)
			Pain, SF McGill Pain Questionnaire Total ☐
			Mean score: 11.4 at 8 weeks (p<0.001)
			95% CI: 9.69, 13.11
		Placebo	Average daily pain, Likert scale (0-10)
		1 ldocso	Mean score: 6.0 at 8 weeks□
		N=116	95% CI: 5.56, 6.44
		14-110	Global Impression of Change, Moderately or
			much improved
			% of patients: 12.1% at 8 weeks
			Pain, SF McGill Pain Questionnaire Total ☐
			Mean score: 16.8 at 8 weeks
Cornoll	RCT	Cahanantin	95% CI: 14.83, 18.77 Average daily pain score, Likert scale (0-10)□
Serpell□ 2002□	Parallel	Gabapentin	Mean score: 5.6 at 8 weeks (p=0.048)
UK and Republic of	Multicenter	N=153	iviedii score. 5.0 at 6 weeks (p=0.046)
	Mullicenter	N= 153	Clabal Insurancian of Change Vancoush as
Ireland □			Global Impression of Change, Very much or
□ Efficacy auclitus Fair			much improved □
Efficacy quality: Fair			% of patients: 34% at 8 weeks (p=0.03)
			Response, >50% reduction in mean pain score
			from baseline
		-	% of patients: 21% at 8 weeks (p=0.16)
		Placebo	Average daily pain score, Likert scale (0-10)□
			Mean score: 6.3 at 8 weeks
		N=152	
			Global Impression of Change, Very much or
			much improved□
			% of patients: 16% at 8 weeks
			Response, >50% reduction in mean pain score
			from baseline □
			% of patients: 14% at 8 weeks

Study	Design	Intervention	Patient-reported pain
Simpson (A) Part 1□	RCT	Gabapentin	Average pain intensity, SF-MPQ Present Pain
2001	Parallel	900-2700 mg	Intensity
US		900-2700 mg	Mean score: data NR at 8 weeks
030	Single Center	N-20	
Efficiency supplies EAID		N=30	(pNR(significant))
Efficacy quality: FAIR			Average pain, 11-point Likert scale (0-10)□
			Mean score: 4.0 at 8 weeks (p<0.01)
			Average pain, SF-MPQ Total□
			Mean score: data NR at 8 weeks
			(pNR(significant))
			Average pain, SF-MPQ VAS (0-100)□
			Mean score: data NR at 8 weeks
			(pNR(significant))
			Global Impression of Change, Much/moderately
			improved□
			% of patients: data NR at 8 weeks (p=NR)
		Placebo	Average pain intensity, SF-MPQ Present Pain
		1 lacebo	Intensity
		N=30	,
		14-30	Mean score: data NR at 8 weeks
			Average pain, 11-point Likert scale (0-10)
			Mean score: 6.0 at 8 weeks
			Average pain, SF-MPQ Total□
			Mean score: data NR at 8 weeks
			Average pain, SF-MPQ VAS (0-100)□
			Mean score: data NR at 8 weeks
			Global Impression of Change, Much/moderately
			improved□
			% of patients: data NR at 8 weeks
Tai	RCT	Gabapentin	Average pain intensity (0-10), 0-10 (NPS cold
2002	Crossover	up to 1800 mg daily	pain)□
US	Single Center		Mean score: 1.59 at 4 weeks (p=NS)
		N=7	Average pain intensity (0-10), 0-10 (NPS deep
Efficacy quality: Poor			pain)□
			Mean score: 4.30 at 4 weeks (p=NS)
			Average pain intensity (0-10), 0-10 (NPS dull
			pain)
			Mean score: 1.67 at 4 weeks (p=NS)
			Average pain intensity (0-10), 0-10 (NPS hot
			• , , , , ,
			pain)
			Mean score: 1.11 at 4 weeks (p=0.065)
			Average pain intensity (0-10), 0-10 (NPS itchy
			pain)□
			Mean score: 0.01 at 4 weeks (p=NS)
			Average pain intensity (0-10), 0-10 (NPS
			sensitive pain)□
			Mean score: 1.46 at 4 weeks (p=NS)
			Average pain intensity (0-10), 0-10 (NPS sharp
			pain)□
			Mean score: 1.37 at 4 weeks (p=NS)
			Average pain intensity (0-10), 0-10 (NPS surface
			pain)□
			Mean score: 1.01 at 4 weeks (p=NS)
			Average pain intensity (0-10), 0-10 (NPS
			unpleasant pain)□
			Mean score: 3.60 at 4 weeks (p=0.028)
			Average pain intensity (0-10), Neuropathic Pain
			Scale (NPS) 0-10 (intense)
			Mean score: 3.7 at 4 weeks (p=0.094)
		Placebo	Average pain intensity (0-10), 0-10 (NPS cold
		i iduebu	• , , , , ,
		NI_7	pain)
		N=7	Mean score: 1.67 at 4 weeks
			Average pain intensity (0-10), 0-10 (NPS deep
			pain)□
I			Mean score: 4.50 at 4 weeks

Study	Design	Intervention	Patient-reported pain
			Average pain intensity (0-10), 0-10 (NPS dull
			pain)
			Mean score: 1.61 at 4 weeks Average pain intensity (0-10), 0-10 (NPS hot
			pain)
			Mean score: 4.54 at 4 weeks
			Average pain intensity (0-10), 0-10 (NPS itchy
			pain)□
			Mean score: 0.03 at 4 weeks
			Average pain intensity (0-10), 0-10 (NPS sensitive pain)□
			Mean score: 1.76 at 4 weeks
			Average pain intensity (0-10), 0-10 (NPS sharp
			pain) □
			Mean score: 2.01 at 4 weeks Average pain intensity (0-10), 0-10 (NPS surface
			pain)
			Mean score: 2.00 at 4 weeks
			Average pain intensity (0-10), 0-10 (NPS
			unpleasant pain)□
			Mean score: 5.33 at 4 weeks
			Average pain intensity (0-10), Neuropathic Pain
			Scale (NPS) 0-10 (intense)□
Yildirim	RCT	Gabapentin	Mean score: 5.29 at 4 weeks Pain at rest, 0-4 (none, mild, moderate, severe)□
2003	Parallel	900 mg-3600 mg	Mean score: 0.56 at 2 months (p<0.001)
Turkey	i didiici	300 mg-3000 mg	95% CI: 0.33, 0.79
l ame,		N=25	0070 011 0100, 011 0
Efficacy quality: FAIR			Pain at rest, 0-4 (none, mild, moderate, severe)
			Mean score: 0.73 at 1 month (p<0.05)□
			95% CI: 0.44, 1.02
		Discolor	Deire of work 0.4 (many grille) and death accounty
		Placebo	Pain at rest, 0-4 (none, mild, moderate, severe)
		N=25	Mean score: 1.36 at 2 months ☐ 95% CI: 1.13, 1.59
		14-25	55 % GI. 1.15, 1.55
			Pain at rest, 0-4 (none, mild, moderate, severe)
			Mean score: 1.47 at 1 month □
			95% CI: 1.20, 1.74
O: (A) D (4	DOT	0.1	
Simpson (A) Part 1 2001	RCT Parallel	Gabapentin 900-2700 mg	Average pain intensity, SF-MPQ Present Pain
US	Single Center	900-2700 mg	Intensity□ Mean score: data NR at 8 weeks
	Olligic Ochici	N=30	(pNR(significant))
Efficacy quality: FAIR			Average pain, 11-point Likert scale (0-10)
			Mean score: 4.0 at 8 weeks (p<0.01)
			Average pain, SF-MPQ Total□
			Mean score: data NR at 8 weeks
			(pNR(significant))
			Average pain, SF-MPQ VAS (0-100)
			Mean score: data NR at 8 weeks (pNR(significant))
			Global Impression of Change, Much/moderately
			improved □
1			% of patients: data NR at 8 weeks (p=NR)
		Placebo	Average pain intensity, SF-MPQ Present Pain
		Placebo	Intensity□
		Placebo N=30	Intensity□ Mean score: data NR at 8 weeks
			Intensity□ Mean score: data NR at 8 weeks Average pain, 11-point Likert scale (0-10)□
			Intensity□ Mean score: data NR at 8 weeks Average pain, 11-point Likert scale (0-10)□ Mean score: 6.0 at 8 weeks
			Intensity Mean score: data NR at 8 weeks Average pain, 11-point Likert scale (0-10) Mean score: 6.0 at 8 weeks Average pain, SF-MPQ Total
			Intensity□ Mean score: data NR at 8 weeks Average pain, 11-point Likert scale (0-10)□ Mean score: 6.0 at 8 weeks

Study	Design	Intervention	Patient-reported pain
			Global Impression of Change, Much/moderately
			improved□
			% of patients: data NR at 8 weeks
Dworkin	RCT	Pregabalin	Average pain intensity (0-10), SF-MPQ Present
2003	Parallel	300-600 mg	Pain Intensity (0-5)□
US	Multicenter		Least squares mean: 1.58 at 8 weeks
		N=89	(p=0.127)□
Efficacy quality: Fair			95% CI: 1.34, 1.82
			Average pain, 11-point scale (0-10)□
			Least squares mean: 3.60 at 8 weeks
			(p=0.0001)□
			95% CI: 3.13, 4.07
			Average pain, SF-MPQ Total (0-45)□
			Least squares mean: 9.85 at 8 weeks
			(p=0.0002)□
			95% CI: 7.99, 11.71
			Average pain, SF-MPQ VAS (100 mm)□
			Least squares mean: 38.68 at 8 weeks
			(p=0.0001)
			95% CI: 33.00, 44.36
			Response, >=30% decrease in pain□
			% of patients: 63% at 8 weeks (p=0.001)
			Response, >=50% decrease in pain□
			% of patients: 50% at 8 weeks
		Dioceho	(pNR(significant))
		Placebo	Average pain intensity (0-10), SF-MPQ Present
		N=04	Pain Intensity (0-5)
		N=84	Least squares mean: 1.98 at 8 weeks □
			95% CI: 1.74, 2.22
			Average pain, 11-point scale (0-10)
			Least squares mean: 5.29 at 8 weeks □
			95% CI: 4.82, 5.76 Average pain, SF-MPQ Total (0-45)□
			Least squares mean: 14.72 at 8 weeks
			95% CI: 12.84, 16.60
			Average pain, SF-MPQ VAS (100 mm)
			Least squares mean: 56.30 at 8 weeks
			95% CI: 50.56, 62.04
			Response, >=30% decrease in pain □
			% of patients: 25% at 8 weeks
			Response, >=50% decrease in pain
			% of patients: 20% at 8 weeks
Freynhagen	RCT	Pregabalin	Average pain, 11-point scale (0-10)□
2005	Parallel	150-600 mg	Mean score: Reported graphically only at 12
Multiple European	Multicenter	g	weeks (p=NR)
		N=141	Global Impression of Improvement, "much
Efficacy quality: Fair			improved" or "very much improved" □
, , ,			% of patients: 52.0% at 12 weeks (p<0.01)
			Response, >=30% reduction in pain □
			% of patients: 59.0% at 12 weeks (p=0.003)
			Response, >=50% reduction in pain □
			% of patients: 48.2% at 12 weeks (p<0.001)
		Pregabalin	Average pain, 11-point scale (0-10)□
		600 mg	Mean score: Reported graphically only at 12
			weeks (p=NR)
		N=132	Global Impression of Improvement, "much
			improved" or "very much improved" □
			% of patients: 53.6% at 12 weeks (p<0.01)
			Response, >=30% reduction in pain □
			% of patients: 66.4% at 12 weeks (p<0.001)
	1		
			Response, >=50% reduction in pain □

Study	Design	Intervention	Patient-reported pain
		Placebo	Average pain, 11-point scale (0-10)□
			Mean score: Reported graphically only at 12
		N=65	weeks
			Global Impression of Improvement, "much
			improved" or "very much improved" □
			% of patients: 30.5% at 12 weeks
			Response, >=30% reduction in pain□
			% of patients: 37.1% at 12 weeks
			Response, >=50% reduction in pain □
			% of patients: 24.2% at 12 weeks
esser	RCT	Pregabalin	Average pain intensity (0-10), SF-MPQ Present
004	Parallel	75 mg	Pain Intensity (0-5)□
JS	Multicenter		Least squares mean: 1.67 at 5 weeks
		N=77	(p=0.4286)□
Efficacy quality: Fair			95% CI: 1.45, 1.89
			Average pain, SF-MPQ Total (0-45)□
			Least squares mean: 15.06 at 5 weeks
			(p=0.9966)□
			95% CI: 13.22, 16.90
			Average pain, SF-MPQ VAS (0-40)□
			Least squares mean: 49.70 at 5 weeks
			(p=0.2947)□
			95% CI: 44.33, 55.07
			Average pain, VAS (0-10)□
			Least squares mean: 4.91 at 5 weeks
			(p=0.6267)□
			95% CI: 4.44, 5.38
			Global impression of improvement, "much
			improved or "very much improved □
			% of patients: data NR at 5 weeks (p=NR)
			Response, >=50% reduction in pain
		Describelle	% of patients: data NR at 5 weeks
		Pregabalin	Average pain intensity (0-10), SF-MPQ Present
		300 mg	Pain Intensity (0-5)□
			Least squares mean: 1.20 at 5 weeks
		N=81	(p=0.0001)
			95% CI: 0.98, 1.42
			Average pain, SF-MPQ Total (0-45)□
			Least squares mean: 10.17 at 5 weeks
			(p=0.0001)□
			95% CI: 8.37, 11.97
			Average pain, SF-MPQ VAS (0-40)□
			Least squares mean: 37.40 at 5 weeks
			(p=0.0001)
			95% CI: 32.13, 42.67
			Average pain, VAS (0-10)□
			Least squares mean: 3.80 at 5 weeks
			(p=0.0001)
			"95% CI: 3.35, 4.25
			Global impression of improvement, "much
			improved" or "very much improved" □
			% of patients: 55.7% at 5 weeks (p=0.001)
			Response, >=50% reduction in pain
			% of patients: 46% at 5 weeks
			(pNR(significant))
		Pregabalin	Average pain intensity (0-10), SF-MPQ Present
			Pain Intensity (0-10), SF-MPQ Present
		600 mg	, ,
		N 00	Least squares mean: 1.18 at 5 weeks
		N=82	(p=0.0001)
			95% CI: 0.96, 1.40
			Average pain, SF-MPQ Total (0-45)□
			Least squares mean: 9.88 at 5 weeks
			(==0.0004)
			(p=0.0001)□

Study	Design	Intervention	Patient-reported pain
			Average pain, SF-MPQ VAS (0-40)□
			Least squares mean: 34.48 at 5 weeks
			(p=0.0001) \(\text{OF} \) \(\text{CF} \) \(20.20.20.67 \)
			95% CI: 29.29, 39.67 Average pain, VAS (0-10)□
			Least squares mean: 3.60 at 5 weeks
			(p=0.0001)□
			95% CI: 3.15, 4.05
			Global impression of improvement, "much
			improved" or "very much improved"□
			% of patients: 69.2% at 5 weeks (p=0.001)
			Response, >=50% reduction in pain□
			% of patients: 48% at 5 weeks
		Diagona	(pNR(significant))
		Placebo	Average pain intensity (0-10), SF-MPQ Present Pain Intensity (0-5)
		N=97	Least squares mean: 1.79 at 5 weeks
			95% CI: 1.59, 1.99
			Average pain, SF-MPQ Total (0-45)□
			Least squares mean: 15.06 at 5 weeks□
			95% CI: 13.41, 16.71
			Average pain, SF-MPQ VAS (0-40)□
			Least squares mean: 53.49 at 5 weeks□
			95% CI: 48.67, 58.31
			Average pain, VAS (0-10)
			Least squares mean: 5.06 at 5 weeks ☐ 95% CI: 4.65, 5.47
			Global impression of improvement, "much
			improved" or "very much improved"□
			% of patients: 24.2% at 5 weeks
			Response, >=50% reduction in pain□
			% of patients: 18% at 5 weeks
Richter	RCT	Pregabalin	Average pain intensity (0-10), SF-MPQ Present
2005	Parallel Multicenter	150 mg	Pain Intensity (0-5)□ Least squares mean: 1.78 at 6 weeks
US	IVIIIIICenter		
	Walloonto.	N=70	·
Efficacy quality: Fair	Maladoritor	N=79	(p=0.2836)□
Efficacy quality: Fair	manuscriter	N=79	(p=0.2836)□ 95% CI: 1.54, 2.02
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0- 10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved"
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□
Efficacy quality: Fair		N=79	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6
Efficacy quality: Fair			(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6 weeks (p=NS)
Efficacy quality: Fair		Pregabalin	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6 weeks (p=NS) Average pain intensity (0-10), SF-MPQ Present
Efficacy quality: Fair			(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6 weeks (p=NS) Average pain intensity (0-10), SF-MPQ Present Pain Intensity (0-5)□
Efficacy quality: Fair		Pregabalin	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6 weeks (p=NS) Average pain intensity (0-10), SF-MPQ Present
Efficacy quality: Fair		Pregabalin 600 mg	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6 weeks (p=NS) Average pain intensity (0-10), SF-MPQ Present Pain Intensity (0-5)□ Least squares mean: 1.30 at 6 weeks (p=0.0002)□
Efficacy quality: Fair		Pregabalin 600 mg	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0- 10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6 weeks (p=NS) Average pain intensity (0-10), SF-MPQ Present Pain Intensity (0-5)□ Least squares mean: 1.30 at 6 weeks
Efficacy quality: Fair		Pregabalin 600 mg	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6 weeks (p=NS) Average pain intensity (0-10), SF-MPQ Present Pain Intensity (0-5)□ Least squares mean: 1.30 at 6 weeks (p=0.0002)□ 95% CI: 1.06, 1.54 Average pain, 11-point numeric rating scale (0-10)□
Efficacy quality: Fair		Pregabalin 600 mg	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6 weeks (p=NS) Average pain intensity (0-10), SF-MPQ Present Pain Intensity (0-5)□ Least squares mean: 1.30 at 6 weeks (p=0.0002)□ 95% CI: 1.06, 1.54 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 4.29 at 6 weeks
Efficacy quality: Fair		Pregabalin 600 mg	(p=0.2836)□ 95% CI: 1.54, 2.02 Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.11 at 6 weeks (p=0.1763)□ 95% CI: 4.64, 5.58 Average pain, SF-MPQ Total□ Least squares mean: 15.48 at 6 weeks (p=0.0651)□ 95% CI: 13.54, 17.42 Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 53.27 at 6 weeks (p=0.2058)□ 95% CI: 47.88, 58.66 Global impression of change, "much improved" or "very much improved"□ % of patients: reported graphically only at 6 weeks (p=NS) Average pain intensity (0-10), SF-MPQ Present Pain Intensity (0-5)□ Least squares mean: 1.30 at 6 weeks (p=0.0002)□ 95% CI: 1.06, 1.54 Average pain, 11-point numeric rating scale (0-10)□

Study	Design	Intervention	Patient-reported pain
			Average pain, SF-MPQ Total□ Least squares mean: 12.14 at 6 weeks (p=0.0002)□ 95% CI: 10.24, 14.04
			Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 43.38 at 6 weeks (p=0.0002)□
			95% CI: 38.09, 48.67 Global impression of change, "much improved" or "very much improved" ○ % of patients: reported graphically only at 6
		Placebo	weeks (p=0.002) Average pain intensity (0-10), SF-MPQ Present
		N=85	Pain Intensity (0-5)□ Least squares mean: 1.96 at 6 weeks□ 95% CI: 1.74, 2.18
			Average pain, 11-point numeric rating scale (0-10)□ Least squares mean: 5.55 at 6 weeks□ 95% CI: 5.10, 6.00
			Average pain, SF-MPQ Total Least squares mean: 17.97 at 6 weeks 95% CI: 16.09, 19.85 Average pain, SF-MPQ VAS (100 mm)
			Least squares mean: 58.05 at 6 weeks□ 95% CI: 52.80, 63.30
			Global impression of change, "much improved" or "very much improved" □ % of patients: reported graphically only at 6
Rosenstock	RCT	Pregabalin	weeks Average pain intensity (0-10), SF-MPQ Present
2004 US	Parallel Multicenter	300 mg	Pain Intensify (0-5)□
	Widiticeriter	N=76	Least squares mean: 1.42 at 8 weeks (p=0.0364)□ 95% CI: 1.17, 1.67
Efficacy quality: Fair			Average pain, 11-point numeric rating scale (0-10)
			Least squares mean: 3.99 at 8 weeks (p=0.0001)□ 95% CI: 3.48, 4.50
			Average pain, SF-MPQ Total score ☐ Least squares mean: 10.51 at 8 weeks (p=0.0033) ☐ 95% CI: 8.43, 12.59
			Average pain, SF-MPQ VAS (100 mm)□ Least squares mean: 40.83 at 8 weeks (p=0.0002)□ 95% CI: 34.87, 46.79
		Diagolo	Global Impression of Change, Improved (items not specified)□ % of patients: 64.5% at 8 weeks (p=0.001)
		Placebo N=70	Average pain intensity (0-10), SF-MPQ Present Pain Intensify (0-5)□ Least squares mean: 1.79 at 8 weeks□
			95% CI: 1.54, 2.04 Average pain, 11-point numeric rating scale (0-
			10)□ Least squares mean: 5.46 at 8 weeks□ 95% CI: 4.91, 6.01
			Average pain, SF-MPQ Total score Least squares mean: 14.92 at 8 weeks 95% CI: 12.71, 17.13

Study	Design	Intervention	Patient-reported pain
			Average pain, SF-MPQ VAS (100 mm)□
			Least squares mean: 57.02 at 8 weeks□
			95% CI: 50.73, 63.31
			Global Impression of Change, Improved (items
			not specified)□
O-b-t	DOT	Dua wa ha Ku	% of patients: 38.6% at 8 weeks
Sabatowski 2004	RCT	Pregabalin	Average pain, 11-point numeric scale (0-10)
Multiple European and	Parallel Multicenter	150 mg	Least squares mean: 5.14 at 8 weeks (p=0.0002)□
Australia	Mullicenter	N=81	(p=0.0002)□ 95% CI: 4.71, 5.57
Australia		11-01	Average pain, SF-MPQ VAS (100 mm)
Efficacy quality: Fair			Least squares mean: 52.03 at 8 weeks
			(p=0.0060)□
			95% CI: 47.01, 57.05
			Global Impression of Change, "much improved"
			or "very much improved"□
			% of patients: 31% at 8 weeks (p=0.064)
			Response, >=50% reduction in pain□
			% of patients: 26% at 8 weeks (p=0.006)
		Pregabalin	Average pain, 11-point numeric scale (0-10)□
		300 mg	Least squares mean: 4.76 at 8 weeks
			(p=0.0001)□
		N=76	95% CI: 4.31, 5.21
			Average pain, SF-MPQ VAS (100 mm)□
			Least squares mean: 48.41 at 8 weeks
			(p=0.0003)□ 05% Cl. 43.36 F3.56
			95% CI: 43.26, 53.56 Global Impression of Change, "much improved"
			or "very much improved"
			% of patients: 40% at 8 weeks (p=0.002)
			Response, >=50% reduction in pain
			% of patients: 28% at 8 weeks (p=0.003)
		Placebo	Average pain, 11-point numeric scale (0-10)
			Least squares mean: 6.33 at 8 weeks□
		N=81	95% CI: 5.90, 6.76
			Average pain, SF-MPQ VAS (100 mm)□
			Least squares mean: 62.05 at 8 weeks□
			95% CI: 57.03, 67.07
			Global Impression of Change, "much improved"
			or "very much improved"□
			% of patients: 14% at 8 weeks
			Response, >=50% reduction in pain□
	DOT		% of patients: 10% at 8 weeks
van Seventer	RCT Parallel	Pregabalin	Average pain, 11-point numerical rating scale (0-
2006 US and Multiple	Multicenter	150 mg	10)□ Least squares mean: 5.26 at 13 weeks
European	Mullicenter	N=87	(p=0.0077)□
Luiopean		11-07	95% CI: 4.79, 5.73
Efficacy quality: Fair			Global Impression of Change, "much improved"
Emodoy quanty. I all			or "very much improved"□
			% of patients: 22.6% at 13 weeks (p=NR)
			Response, >=30% reduction in pain □
			% of patients: 39.1% at 13 weeks (p<=0.001)
			Response, >=50% reduction in pain □
			% of patients: 26.4% at 13 weeks (p=0.001)
		Pregabalin	Average pain, 11-point numerical rating scale (0-
		300 mg	10)□
			Least squares mean: 5.07 at 13 weeks
		N=98	(p=0.0016)□
			95% CI: 4.62, 5.52
			Global Impression of Change, "much improved"
1			or "very much improved"
			% of patients: 27.2% at 13 weeks (p=NR)

Study	Design	Intervention	Patient-reported pain
			Response, >=30% reduction in pain□ % of patients: 40.8% at 13 weeks (p<=0.001)
			Response, >=50% reduction in pain□ % of patients: 26.5% at 13 weeks (p=0.001)
		Pregabalin 300-600 mg	Average pain, 11-point numerical rating scale (0-10)
		N=90	Least squares mean: 4.35 at 13 weeks (p=0.0003)□ 95% CI: 3.88, 4.82
			Global Impression of Change, "much improved" or "very much improved" % of patients: 36.5% at 13 weeks (p=NR)
			Response, >=30% reduction in pain \(\text{% of patients: } 52.3\% at 13 weeks (p<=NK) \) Response, >=30% reduction in pain \(\text{% of patients: } 52.3\% at 13 weeks (p<=0.001) \)
			Response, >=50% reduction in pain□ % of patients: 37.5% at 13 weeks (p=0.001)
		Placebo	Average pain, 11-point numerical rating scale (0-10)□
l		N=93	Least squares mean: 6.14 at 13 weeks□ 95% CI: 5.69, 6.59
			Global Impression of Change, "much improved" or "very much improved" □
			% of patients: 16.2% at 13 weeks Response, >=30% reduction in pain□
			% of patients: 17.2% at 13 weeks Response, >=50% reduction in pain□
0.11.4.:	DOT	D. I	% of patients: 7.5% at 13 weeks
Goldstein 2005	RCT Parallel	Duloxetine 20 mg daily	24h worst pain score, 11-point Likert scale (0- 10)□
US	Multicenter	N=115	Mean change from baseline: -2.78 at 12 weeks (p=NS)□
Efficacy quality: Fair			95% CI: -3.23, -2.33 24-hour average pain score, 11-point Likert scale (0-10)
			Mean change from baseline: -2.36 at 12 weeks (p=NS)□
			95% CI: -2.77, -1.95 Average pain severity, BPI□ Mean change from baseline: -2.25 at 12 weeks
			(p=NS)□ 95% CI: -2.66, -1.84
			Improvement, PGI-Improvement□ Mean change from baseline: 2.68 at 12 weeks (p=NS)□
			95% CI: 2.44, 2.92 Night pain score, 11-point Likert scale (0-10) Mean change from baseline: -2.48 at 12 weeks
			(p=NS)□ 95% CI: -2.91, -2.05
			Severity of pain, SF McGill Pain Questionnaire Mean change from baseline: -7.23 at 12 weeks (p≤0.05) □ 95% CI: -8.54, -5.92
		Duloxetine	24h worst pain score, 11-point Likert scale (0-
		60 mg daily	10)□ Mean change from baseline: -3.31 at 12 weeks
		N=114	(p≤0.05)□ 95% CI: -3.78, -2.84

Study	Design	Intervention	Patient-reported pain
			24-hour average pain score, 11-point Likert scale
			(0-10)
			Mean change from baseline: -2.89 at 12 weeks
			(p=NS)□ 95% CI: -3.32, -2.46
			Average pain severity, BPI□
			Mean change from baseline: -2.81 at 12 weeks
			(p≤0.01)□
			95% CI: -3.22, -2.40
			Improvement, PGI-Improvement□
			Mean change from baseline: 2.21 at 12 weeks
			(p≤0.001)□
			"95% CI: 1.97, 2.45
			Night pain score, 11-point Likert scale (0-10)□
			Mean change from baseline: -2.91 at 12 weeks
			(p≤0.05)□
			95% CI: -3.36, -2.46
			Severity of pain, SF McGill Pain Questionnaire
			Total score □
			Mean change from baseline: -8.25 at 12 weeks
			(p≤0.001)□
			"95% CI: -9.52, -6.98
		Duloxetine	24h worst pain score, 11-point Likert scale (0-
		60 mg BID	10)□
		Total daily dose: 120 mg/d	Mean change from baseline: -3.72 at 12 weeks
			(p≤0.001)□
		N=113	95% CI: -4.19, -3.25
			24-hour average pain score, 11-point Likert scale
			(0-10)□
			Mean change from baseline: -3.24 at 12 weeks
			(p=NS)□
			95% CI: -3.69, -2.79
			Average pain severity, BPI
			Mean change from baseline: -3.07 at 12 weeks (p≤0.001)□
			95% CI: -3.50, -2.64
			Improvement, PGI-Improvement□
			Mean change from baseline: 2.24 at 12 weeks
			(p≤0.01)□
			95% CI: 2.00, 2.48
			Night pain score, 11-point Likert scale (0-10)□
			Mean change from baseline: -3.45 at 12 weeks
			(p≤0.001)□
			95% CI: -3.92, -2.98
			Severity of pain, SF McGill Pain Questionnaire
			Total score
			Mean change from baseline: -9.18 at 12 weeks
			(p≤0.001)□
			95% Cl: -10.43, -7.93
		Placebo□	24h worst pain score, 11-point Likert scale (0-
			10)□
		N=115	Mean change from baseline: -2.09 at 12
			weeks□
			95% CI: -2.56, -1.62
			24-hour average pain score, 11-point Likert scale
			(0-10)□
			Mean change from baseline: -1.91 at 12
			weeks□
			95% CI: -2.34, -1.48

Study	Design	Intervention	Patient-reported pain
			Average pain severity, BPI□
			Mean change from baseline: -2.04 at 12
			weeks
			95% CI: -2.45, -1.63
			Improvement, PGI-Improvement□
			Mean change from baseline: 2.91 at 12 weeks□
			95% CI: 2.67, 3.15
			Night pain score, 11-point Likert scale (0-10)□
			Mean change from baseline: -2.20 at 12
			weeks□
			95% CI: -2.65, -1.75
			Severity of pain, SF McGill Pain Questionnaire
			Total score □
			Mean change from baseline: -5.39 at 12
			weeks
DId- (D) 0005I	DOT	Dutau-fa	95% CI: -6.68, -4.10
Raskin (B) 2005 and	RCT	Duloxetine □	24-hour average pain score, 11-point Likert
2006	Parallel	60 mg once daily□	scale□
2005	Multicenter	Total daily dose: 60 mg□	Mean change from baseline: -2.50 at 12 weeks
US			(p≤0.001)□
		N=116	95% CI: -2.85, -2.15
Efficacy quality: Fair			24-hour worst pain score, Likert scale □
			Mean change from baseline: -2.97 at 12 weeks
			(p≤0.001)□
			95% CI: -3.36, -2.58
			Average pain, BPI□
			Mean change from baseline: -2.65 at 12 weeks
			(p≤0.01)□
			95% CI: -3.02, -2.28
			Average pain, SF-McGill Pain Questionnaire□
			Mean change from baseline: -7.47 at 12 weeks
			(p≤0.01)□
			95% CI: -8.67, -6.27
			Improvement, PGI-Improvement□
			Mean change from baseline: 2.50 at 12 weeks
			(p≤0.001)□
			95% CI: 2.30, 2.70
			Night pain score, Likert scale □
			Mean change from baseline: -2.81 at 12 weeks
			(p≤0.001)□
			95% CI: -3.18, -2.44
		Duloxetine	24-hour average pain score, 11-point Likert
		60 mg twice daily	scale□
		Total daily dose: 120 mg	Mean change from baseline: -2.47 at 12 weeks
			(p≤0.001)□
		N=116	95% CI: -2.82, -2.12
			24-hour worst pain score, Likert scale □
			Mean change from baseline: -2.84 at 12 weeks
			(p≤0.01)□
			95% CI: -3.23, -2.45
			Average pain, BPI□
			Mean change from baseline: -2.62 at 12 weeks
			(p≤0.01)□
			95% CI: -2.99, -2.25 Average pain, SF-McGill Pain Questionnaire□
			Mean change from baseline: -7.82 at 12 weeks
			(p≤0.001)□
			95% CI: -9.02, -6.62
			Improvement, PGI-Improvement□
			Mean change from baseline: 2.54 at 12 weeks
			(p≤0.001)□
			95% CI: 2.34, 2.74

Study	Design	Intervention	Patient-reported pain
			Night pain score, Likert scale ☐
			Mean change from baseline: -2.78 at 12 weeks
			(p≤0.001)□
		Placebo	95% CI: -3.15, -2.41
		Placebo	24-hour average pain score, 11-point Likert scale□
		N=116	Mean change from baseline: -1.60 at 12
		14-110	weeks
			95% CI: -1.95, -1.25
			24-hour worst pain score, Likert scale □
			Mean change from baseline: -2.03 at 12
			weeks
			95% CI: -2.42, -1.64
			Average pain, BPI□
			Mean change from baseline: -1.82 at 12
			weeks□
			95% CI: -2.19, -1.45
			Average pain, SF-McGill Pain Questionnaire□
			Mean change from baseline: -4.96 at 12
			weeks□
			95% CI: -6.14, -3.78
			Improvement, PGI-Improvement□
			Mean change from baseline: 3.04 at 12 weeks□
			95% CI: 2.84, 3.24
			Night pain score, Likert scale□
			Mean change from baseline: -1.87 at 12
			weeks□
			95% CI: -2.24, -1.50
Wernicke	RCT	Duloxetine	24-hour average pain score, 11-point Likert scale
2006	Parallel	60 mg once daily	(0=no pain, 10=worst pain)□
US	Multicenter	Total daily dose: 60 mg	Mean change from baseline: -2.72 at 12 weeks
F#:		N. 444	(p<0.001) □
Efficacy quality: Fair		N=114	95% CI: -3.15, -2.29
			24-hour worst pain score, 11-point Likert scale
			(0=no pain, 10=worst pain)□
			Mean change from baseline: -3.21 at 12 weeks (p<0.001)□
			95% CI: -3.70, -2.72
			Average pain severity, BPI
			Mean change from baseline: -2.66 at 12 weeks
			(p<0.001)□
			95% CI: -3.11, -2.21
			Improvement, PGI-Improvement□
			Mean change from baseline: 2.61 at 12 weeks
			(p<0.01)□
			95% CI: -0.21, 5.43
			Night pain score, 11-point Likert scale (0=no
			pain, 10=worst pain)□
			Mean change from baseline: -2.95 at 12 weeks
			(p<0.01)□
			95% CI: -3.44, -2.46
			Worst pain, BPI□
			Mean change from baseline: -3.33 at 12 weeks
			(p<0.001)
			95% CI: -3.86, -2.80
			33 / OI3.00, -2.00
		Duloxetine	24-hour average pain score, 11-point Likert scale
		Duloxetine 60 mg twice daily	
			24-hour average pain score, 11-point Likert scale
		60 mg twice daily	24-hour average pain score, 11-point Likert scale (0=no pain, 10=worst pain)□

Study	Design	Intervention	Patient-reported pain
			24-hour worst pain score, 11-point Likert scale
			(0=no pain, 10=worst pain)□
			Mean change from baseline: -3.39 at 12 weeks
			(p<0.001)□
			95% CI: -3.90, -2.88
			Average pain severity, BPI□
			Mean change from baseline: -3.05 at 12 weeks
			(p<0.001)□
			95% CI: -3.52, -2.58
			Improvement, PGI-Improvement□
			Mean change from baseline: 2.40 at 12 weeks
			(p<0.001)□
			"95% CI: -0.13, 4.93
			Night pain score, 11-point Likert scale (0=no
			pain, 10=worst pain)□
			Mean change from baseline: -3.08 at 12 weeks
			(p<0.001)
			95% CI: -3.57, -2.59
			Worst pain, BPI□
			Mean change from baseline: -3.50 at 12 weeks
			(p<0.001)□
			" ,
		Diacoba	95% CI: -4.05, -2.95
		Placebo	24-hour average pain score, 11-point Likert scale
		N=100	(0=no pain, 10=worst pain)□
		N=108	Mean change from baseline: -1.39 at 12
			weeks □
			95% CI: -1.84, -0.94
			24-hour worst pain score, 11-point Likert scale
			(0=no pain, 10=worst pain)□
			Mean change from baseline: -1.94 at 12
			weeks□
			95% CI: -2.43, -1.45
			Average pain severity, BPI□
			Mean change from baseline: -1.48 at 12
			weeks□
			95% CI: -1.93, -1.03
			Improvement, PGI-Improvement□
			Mean change from baseline: 3.17 at 12 weeks□
			95% CI: 0.35, 5.99
			Night pain score, 11-point Likert scale (0=no
			pain, 10=worst pain)□
			Mean change from baseline: -1.83 at 12
			weeks
			95% CI: -2.30, -1.36
			95 % Gt2.30, -1.30 Worst pain, BPI□
			Mean change from baseline: -1.98 at 12
			weeks
Dowbath (C)	DCT	Vanlatavia	95% CI: -2.53, -1.43
Rowbotham (C)	RCT	Venlafaxine	Pain intensity, VAS (0-100)
2004	Parallel	75 mg daily	Mean change from baseline (adjusted): 22.4 at
US	Multicenter	ļ., ₂ ,	6 weeks (p=NS)
		N=81	
Efficacy quality: Fair			Pain relief, Global pain relief (0-5)□
			Mean score: 2.8 at 6 weeks (p=NS)
			Pain relief, VAS (0-100)□
			Mean change from baseline (adjusted): 51.0 at
			6 weeks (p=NS)
		Venlafaxine	Pain intensity, VAS (0-100)□
		150-225 mg daily	Mean change from baseline (adjusted): 33.8 at
			6 weeks (p<0.001)
		N=82	5
		14 02	Pain relief, Global pain relief (0-5)□
			Mean score: 3.3 at 6 weeks (p<0.01)
			weeks (4>0.01)

Study	Design	Intervention	Patient-reported pain
			Pain relief, VAS (0-100)□
			Mean change from baseline (adjusted): 59.9 at
		5	6 weeks (p<0.001)
		Placebo	Pain intensity, VAS (0-100)□
		N 04	Mean change from baseline (adjusted): 18.7 a
		N=81	6 weeks
			Pain relief, Global pain relief (0-5)□
			Mean score: 2.7 at 6 weeks
			Pain relief, VAS (0-100)□
			Mean change from baseline (adjusted): 43.6 a
			6 weeks
Tasmuth	RCT	Venlafaxine	Pain intensity, Current VAS (0-100)□
2002	Crossover	37.5 mg	Median score (range): 13 (0-62) at 4 weeks
inland	Single Center		(p=NS)
		N=13	Pain intensity, Current VRS (0-7)□
Efficacy quality: FAIR			Median score (range): 0 (0-4) at 4 weeks
			(p=NS)
			Pain relief, Current VAS (0-100)□
			Median score (range): 20 (0-100) at 4 weeks
			(p=NS)
			Pain relief, Current VRS (0-5)□
			Median score (range): 1 (0-4) at 4 weeks
			(p=NS)
		Venlafaxine	Pain intensity, Current VAS (0-100)□
		75 mg	Median score (range): 0 (0-35) at 4 weeks
			(p=NS)
		N=11	Pain intensity, Current VRS (0-7)□
			Median score (range): 0 (0-4) at 4 weeks
			(p=NS)
			Pain relief, Current VAS (0-100)□
			Median score (range): 42 (0-100) at 4 weeks
			(p=NS)
			Pain relief, Current VRS (0-5)□
			Median score (range): 1.5 (0-4) at 4 weeks
			(p=NS)
		Placebo	Pain intensity, Current VAS (0-100)□
		Пассьо	Median score (range): 8 (0-67) at 4 weeks
		N=13	Pain intensity, Current VRS (0-7)
		11-15	Median score (range): 1 (0-4) at 4 weeks
			Pain relief, Current VAS (0-100)
			. ,
			Median score (range): 0 (0-69) at 4 weeks Pain relief, Current VRS (0-5)□
			* * *
		Discorbes	Median score (range): 0 (0-3) at 4 weeks
		Placebo	Pain intensity, Current VAS (0-100)
			Median score (range): 0.6 (0-70) at 4 weeks
		N=11	Pain intensity, Current VRS (0-7)□
			Median score (range): 1 (0-2) at 4 weeks
			Pain relief, Current VAS (0-100)□
			Median score (range): 25 (0-100) at 4 weeks
			Pain relief, Current VRS (0-5)□
			Median score (range): 1 (0-3) at 4 weeks
'ucel	RCT	Venlafaxine	Improvement, Global efficacy rated excellent of
2005	Parallel	75 mg	good□
Turkey	Single Center		% of patients: 68% at 6 weeks (p=NS)
		N=19	
Efficacy quality: Fair			Pain intensity, VAS (0-10)□
-			Median score (range): 4 (0-6) at 6 weeks
			(p=NS)
		Venlafaxine	Improvement, Global efficacy rated excellent or
		150 mg	good □
		Ŭ	% of patients: 41% at 6 weeks (p=NS)
		N=17	(F 1.0)
	1	ļ.· · · ·	

Study	Design	Intervention	Patient-reported pain
			Pain intensity, VAS (0-10)□ Median score (range): 4 (0-8) at 6 weeks (p=NS)
		Placebo	Improvement, Global efficacy rated excellent or good □
		N=19	% of patients: 42% at 6 weeks Pain intensity, VAS (0-10)
Estanislao	RCT	Lidocaine gel	Median score (range): 7 (0-10) at 6 weeks Average pain, Gracely Pain Scale□
2004 US	Crossover Multicenter	5% N=32	Mean score (Phase A, before crossover): 1.09 at 2 weeks (p=NS)□ 95% CI: 1.01, 1.17
Efficacy quality: Fair			Average pain, Gracely Pain Scale□ Mean score (Phase B, after crossover): 1.16 at 2 weeks (p=NS)□ 95% Cl: 1.05, 1.27 Pain relief, Global pain relief□ Mean score: 2.25 at 2 weeks (p=0.715)□
		Placebo	95% CI: 1.99, 2.51 Average pain, Gracely Pain Scale□
		N=32	Mean score (Phase B, after crossover): 1.10 at 2 weeks□
			95% CI: 0.99, 1.21 Average pain, Gracely Pain Scale□ Mean score: 1.15 at 2 weeks□ 95% CI: 1.04, 1.26 Pain relief, Global pain relief□ Mean score: 2.23 at 2 weeks□
Davida dha a (A)	DOT	I de este e est	95% CI: 1.98, 2.48
Rowbotham (A) 1995 US	RCT Crossover Single Center	Lidocaine gel 5%	Allodynia, 4-item scale (0-3)□ Mean change from baseline: -0.47 at After gel removal (p=0.021)
Efficacy quality: Fair		N=39	Pain intensity, VAS (0-100)□ Mean change from baseline: Reported graphically only at 30 min, 1, 2, 3, 4, and 8 hours
			Pain relief, Category scale (6 items, worse to complete relief)□ Mean change from baseline: Reported graphically only at 30 min, 1, 2, 3, 4, and 8 hours
		Placebo	Allodynia, 4-item scale (0-3)□ Mean change from baseline: -0.14 at After gel
		N=39	removal Pain intensity, VAS (0-100)□ Mean change from baseline: Reported graphically only at 30 min, 1, 2, 3, 4, and 8 hours
			Pain relief, Category scale (6 items, worse to complete relief)□ Mean change from baseline: Reported graphically only at 30 min, 1, 2, 3, 4, and 8 hours
Galer (A) 2002 US	RCT Parallel Multicenter	Lidocaine topical patch N=67	Pain, NPS 4 Score (0-100)□ Mean change from baseline: 18.0 at 3 weeks (p=0.013)□
Efficacy quality: Poor			Pain, NPS Composite Score (0-100)□ Mean change from baseline: 15.3 at 3 weeks (p=0.043)□

Study	Design	Intervention	Patient-reported pain
			Pain, NPS Nonallodynic Score (0-100)□ Mean change from baseline: 15.1 at 3 weeks (p=0.022)□
			Pain, NPS Total Descriptor Score (0-100)□ Mean change from baseline: 14.1 at 3 weeks (p=0.042)□
		Placebo	Pain, NPS 4 Score (0-100)□ Mean change from baseline: 6.6 at 3 weeks□
		N=29	
			Pain, NPS Composite Score (0-100)□ Mean change from baseline: 7.7 at 3 weeks□
			Pain, NPS Nonallodynic Score (0-100)□ Mean change from baseline: 6.8 at 3 weeks□
			Pain, NPS Total Descriptor Score (0-100)□ Mean change from baseline: 6.6 at 3 weeks□
Galer (B) 1999	RCT Crossover	Lidocaine topical patch	Pain relief, Verbal pain relief scale (0- 5)□ % of patients: 90.6% at 2-14 days (p=NR)
US	Multicenter	N=32	Pain relief, Verbal pain relief scale (0- 5)□
Efficacy quality: FAIR			Median "time to exit": >14 days at 2-14 days (p<0.001)
		Placebo	Pain relief, Verbal pain relief scale (0- 5)□ % of patients: 40.6% at 2-14 days
		N=32	Pain relief, Verbal pain relief scale (0- 5)□ Median "time to exit": 3.8 days at 2-14 days
Meier 2003 Germany and	RCT Crossover Multicenter	Lidocaine topical patch 5%	Allodynia, VAS (0-100)□ Mean change from baseline: Reported graphically only at 2 hours to 7 days
Switzerland Efficacy quality: POOR		N=28	Pain intensity, VAS (0-100)□ Mean change from baseline: Reported
		Placebo	graphically only at 2 hours to 7 days Allodynia, VAS (0-100)□ Mean change from baseline: Reported
		N=30	graphically only at 2 hours to 7 days Pain intensity, VAS (0-100)□
			Mean change from baseline: Reported graphically only at 2 hours to 7 days
Rowbotham (B) 1996 US	RCT Crossover Single Center	Lidocaine topical patch 5%; up to 3 patches to cover area	Pain intensity, VAS (0-100)□ Mean change from baseline: 10.2 mm at 30 min, 1, 2, 4, 6, 9, 12 hours (p=<0.001-p=0.038)
Efficacy quality: Fair		N=40	Pain relief, Category scale (0-4; 0=worse, 4= "a lot" ☐ Mean score: 2.17 at 30 min, 1, 2, 4, 6, 9, 12
		Placebo	hours (p=0.033)
		Placebo N=35	Pain intensity, VAS (0-100)□ Mean change from baseline: Reported graphically only at 30 min, 1, 2, 4, 6, 9, 12 hours

Study	Design	Intervention	Patient-reported pain
			Pain relief, Category scale (0-4; 0=worse, 4= "a
			lot"□
			Mean change from baseline: Reported
			graphically only at 30 min, 1, 2, 4, 6, 9, 12 hours

gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention	Observer-reported pain
Rice	RCT	Gabapentin	Global impression of improvement, Very
2001	Parallel	1800 mg	much or much improved
UK	Multicenter		% of patients: 44% at 7 weeks (p=0.002)
		N=115	, ,
Efficacy quality: Fair		Gabapentin	Global impression of improvement, Very
, ,		2400 mg	much or much improved
		3	% of patients: 44% at 7 weeks (p=0.001)
		N=108	, and a parameter of the control (processes)
		Placebo	Global impression of improvement, Very
			much or much improved
		N=111	% of patients: 19% at 7 weeks
Rowbotham (D)	RCT	Gabapentin	Global impression of improvement,
1998	Parallel	3600 mg	Moderately or much improved
US	Multicenter	occo mg	% of patients: 39.5% at 8 weeks (p=NR)
	Waltioonto	N=113	70 of patients. 00.070 at 0 Wooke (p. 1111)
Efficacy quality: Fair		Placebo	Global impression of improvement,
Lineacy quanty: 1 an		1 Idocbo	Moderately or much improved
		N=116	% of patients: 12.9% at 8 weeks
Serpell	RCT	Gabapentin	Global impression of improvement, Very
2002	Paralle	Саваропин	much or much improved
UK and Republic of	Multicenter	N=153	% of patients: 38% at 8 weeks (p=0.01)
Ireland	Managemen	14 100	70 of patients. 00 % at 0 weeks (p 0.01)
Il Claria		Placebo	Global impression of improvement, Very
Efficacy quality: Fair		1 Idoobo	much or much improved
Emodoy quanty: 1 an		N=152	% of patients: 18% at 8 weeks
Simpson (A) Part 1	RCT	Gabapentin	Global impression of Change,
2001	Parallel	900-2700 mg	Much/moderately improved
US	Single Center	500 27 00 mg	% of patients: 55.5% at 8 weeks (p<0.01)
	Cirigio Cornor	N=30	70 of patients. 00.070 at 0 Wooke (p. 10.01)
Efficacy quality: Fair		Placebo	Global impression of Change,
Lineacy quality. I all		1 Idocbo	Much/moderately improved
		N=30	% of patients: 25.9% at 8 weeks
		Gabapentin	Global impression of Change,
		900-2700 mg	Much/moderately improved
		500 27 00 mg	% of patients: 55.5% at 8 weeks (p<0.01)
		N=30	70 of patients. 00.070 at 0 weeks (p 10.01)
		Placebo	Global impression of Change,
		i lacebo	Much/moderately improved
		N=30	% of patients: 25.9% at 8 weeks
Lesser	RCT	Pregabalin	Global impression of improvement, "much
2004	Parallel	75 mg	improved" or "very much improved"
US	Multicenter	7 5 mg	% of patients: data NR at 5 weeks
00	MINITIOGNIC	N=77	(p=NR)
Efficacy quality: Fair		IN- / /	(P-1417)
Lineacy quality. Fall		Pregabalin	Global impression of improvement, "much
		300 mg	improved" or "very much improved"
		Jou mg	% of patients: 58.2% at 5 weeks
		N=81	(p=0.001)
		14-01	(P-0.001)

gabapentin. SNRIs and topical lidocaine for neuropathic pain

gabapentin, SNRIs and			
Study	Design	Intervention	Observer-reported pain
		Pregabalin 600 mg	Global impression of improvement, "much improved" or "very much improved" % of patients: 64.1% at 5 weeks
		N=82	(p=0.001)
		Placebo	Global impression of improvement, "much improved" or "very much improved"
		N=97	% of patients: 26.3% at 5 weeks
Richter	RCT	Pregabalin	Global impression of change, "much
2005	Parallel	150 mg	improved" or "very much improved"
US	Multicenter	N=79	% of patients: reported graphically only at 6 weeks (p=NS)
Efficacy quality: Fair		Pregabalin	Global impression of change, "much
		600 mg	improved" or "very much improved"
		N=82	% of patients: reported graphically only at 6 weeks (p=0.002)
		Placebo□	Global impression of change, "much
			improved" or "very much improved"
		N=85	% of patients: reported graphically only at
			6 weeks
Rosenstock	RCT	Pregabalin	Global impression of change, Improved
2004	Parallel	300 mg	(items not specified)
US	Multicenter		% of patients: 59.2% at 8 weeks
		N=76	(p=0.004)
Efficacy quality: Fair		Placebo	Global impression of change, Improved (items not specified)
		N=70	% of patients: 38.6% at 8 weeks
Sabatowski	RCT	Pregabalin	Global impression of Change, "much
2004	Parallel	150 mg	improved" or "very much improved"
Multiple European and	Multicenter		% of patients: data NR at 8 weeks
Australia		N=81	
		Pregabalin	Global impression of Change, "much
Efficacy quality: Fair		300 mg	improved" or "very much improved"
			% of patients: data NR at 8 weeks
		N=76	
		Placebo	Global impression of Change, "much
		NI 04	improved" or "very much improved"
Coldatain	RCT	N=81 Duloxetine	% of patients: data NR at 8 weeks
Goldstein 2005	Parallel		Severity, CGI-Severity Mean change from baseline: -1.28 at 12
US	Multicenter	20 mg daily	weeks (p≤0.05)
	MUNICELLE	N=115	weeks (ρ≤0.05) 95% CI: -1.50, -1.06
Efficacy quality: Fair		Duloxetine	Severity, CGI-Severity
Linouoy quality. I all		60 mg daily	Mean change from baseline: -1.42 at 12
		oo mg dany	weeks (p≤0.001)
		N=114	95% CI: -1.66, -1.18
		N=114	95% CI: -1.66, -1.18

gabapentin, SNRIs and topical lidocaine for neuropathic pain

		ne for neuropathic pain	Observer reported noin
Study	Design	Intervention	Observer-reported pain
		Duloxetine	Severity, CGI-Severity
		60 mg BID	Mean change from baseline: -1.70 at 12
		Total daily dose: 120	
		mg/d	95% CI: -1.94, -1.46
		N=113	
		Placebo	Severity, CGI-Severity
			Mean change from baseline: -0.83 at 12
		N=115	weeks
			95% CI: -1.07, -0.59
Raskin (B) 2005 and	RCT	Duloxetine	Severity, CGI-Severity
2006	Parallel	60 mg once daily	Mean change from baseline: -1.42 at 12
2005	Multicenter	Total daily dose: 60	weeks (p≤0.001)
US		mg	95% CI: -1.60, -1.24
Efficacy quality: Fair		N=116	
Emodoy quality. I all		Duloxetine	Severity, CGI-Severity
		60 mg twice daily	Mean change from baseline: -1.40 at 12
		Total daily dose: 120	
		•	95% CI: -1.60, -1.20
		mg	95 % Ci1.00, -1.20
		N=116	
		Placebo	Severity, CGI-Severity
			Mean change from baseline: -0.93 at 12
		N=116	weeks
			95% CI: -1.11, -0.75
Wernicke	RCT	Duloxetine	Severity of pain, CGI-Severity
2006	Parallel	60 mg once daily	Mean change from baseline: -1.37 at 12
US	Multicenter	Total daily dose: 60	weeks (p<0.05)
Efficacy quality: Fair		mg	95% CI: -1.59, -1.15
Emodey quanty. I am		N=114	
		Duloxetine	Severity of pain, CGI-Severity
		60 mg twice daily	Mean change from baseline: -1.47 at 12
		Total daily dose: 120	weeks (p<0.01)
		mg	95% CI: -1.71, -1.23
		N=112	
		Placebo	Severity of pain, CGI-Severity
			Mean change from baseline: -0.98 at 12
		N=108	weeks
			95% CI: -1.22, -0.74
Rowbotham (C)	RCT	Venlafaxine	Global impression of improvement, CGI-
2004	Parallel	75 mg daily	Improvement (1-7)
US	Multicenter		Mean score: 2.5 at 6 weeks (p=NS)
		N=81	
Efficacy quality: Fair			Severity, CGI-Severity (1-7)
			Mean score: 3.2 at 6 weeks (p=NS)
	1		3311 33313. 3.2 at 3 113310 (p 140)

gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention	Observer-reported pain
		Venlafaxine	Global impression of improvement, CGI-
		150-225 mg daily	Improvement (1-7)
			Mean score: 2.1 at 6 weeks (p<0.001)
		N=82	
			Severity, CGI-Severity (1-7)
			Mean score: 2.8 at 6 weeks (p<0.001)
		Placebo	Global impression of improvement, CGI- Improvement (1-7)
		N=81	Mean score: 2.8 at 6 weeks
			Severity, CGI-Severity (1-7)
			Mean score: 3.5 at 6 weeks

Study	Design	Intervention	Functional capacity
Backonja	RCT	Gabapentin	Quality of life, SF-36 Bodily Pain□
1999	Parallel	3600 mg	Mean score: 55.2 at 8 weeks (p=0.01)
US	Multicenter	3	Quality of life, SF-36 Mental Health□
		N=84	Mean score: 75.7 at 8 weeks (p=0.03)
Efficacy quality: Fair			Quality of life, SF-36 Vitality □
Lineary quanty: 1 an			Mean score: 53.5 at 8 weeks (p=0.001)
			Wedit 30016. 00.0 at 6 Weeks (p 0.001)
		Placebo	Quality of life, SF-36 Bodily Pain□
		1 100000	Mean score: 47.4 at 8 weeks
		N=81	Quality of life, SF-36 Mental Health □
			Mean score: 70.4 at 8 weeks
			Quality of life, SF-36 Vitality □
			Mean score: 43.7 at 8 weeks
Bone	RCT	Gabapentin	Activities of Daily Living, Barthel Index□
2002	Crossover	2400 mg	Median score: 85 at 6 weeks (p=NS)□
UK and Ireland	Single Center	2400 mg	IQR: (70-105)
OR and ireland	Single Center	N=10	IQIV. (70-103)
Efficacy quality: Fair		14-10	
Lineacy quality. I all		Placebo	Activities of Daily Living, Barthel Index□
		i idoobo	Median score: 87 at 6 weeks□
		N=9	IQR: (65-105)
		14-5	1Q11. (00-100)
Gilron (A)	RCT	Gabapentin	Quality of life, SF-36 Bodily Pain (0-100)
2005	Crossove	3200 mg	Mean score: 65.6 at 5 weeks (p<0.05)
Canada	Single Center	5_55g	95% CI: 59.92, 71.28
	onigio conte	N=48	3373 311 33132, 7 1123
Efficacy quality: Fair		1.0	
			Quality of life, SF-36 Mental Health (0-
			100)□
			Mean score: 80.9 at 5 weeks (p<0.05)□
			95% CI: 75.80, 86.00
			0070 011 1 0100, 00100
			Quality of life, SF-36 Physical Functioning
			(0-100)
			Mean score: 61.1 at 5 weeks (p<0.05)□
			95% CI: 53.26, 68.94
			3575 31. 35.25, 35.51
		Lorazepam	Quality of life, SF-36 Bodily Pain (0-100)
		1.6 mg	Mean score: 56.0 at 5 weeks□
			95% CI: 50.12, 61.88
		N=44	3373 3 23.12, 31.33
			Quality of life, SF-36 Mental Health (0-
			100) [
			Mean score: 73.4 at 5 weeks□
			95% CI: 68.30, 78.50
			Quality of life, SF-36 Physical Functioning
			(0-100)
			Mean score: 56.0 at 5 weeks□
			95% CI: 48.16, 63.84
			30 /0 Cl. 40. 10, 00.04

Study	Design	Intervention	Functional capacity
Rice	RCT	Gabapentin	Quality of life, : Reported graphically only
2001	Parallel	1800 mg	at 7 weeks
UK	Multicenter		
		N=115	
Efficacy quality: Fair		Gabapentin	Quality of life, : Reported graphically only
		2400 mg	at 7 weeks
		N=108	
		Placebo	Quality of life, : Reported graphically only
			at 7 weeks
		N=111	
Rowbotham (D)	RCT	Gabapentin	Quality of life, SF-36 Bodily pain□
1998	Parallel	3600 mg	Mean score: 57.4 at 8 weeks (p<0.001)□
US	Multicenter		95% CI: 53.77, 61.03
		N=113	
Efficacy quality: Fair			Quality of life, SF-36 General health□
			Mean score: 63.1 at 8 weeks (p=0.65)□
			95% CI: 59.04, 67.16
			Quality of life, SF-36 Mental health
			Mean score: 74.6 at 8 weeks (p<0.001)
			95% CI: 71.54, 77.66
			Quality of life, SF-36 Physical
			functioning
			Mean score: 66.2 at 8 weeks (p=0.01)□
			95% CI: 61.70, 70.70
			Quality of life, SF-36 Vitality□
			Mean score: 55.1 at 8 weeks (p<0.001)□
			95% CI: 51.36, 58.84
		Placebo	Quality of life, SF-36 Bodily pain□
		N 440	Mean score: 47.3 at 8 weeks□
		N=116	95% CI: 43.61, 50.99
			Quality of life, SF-36 General health
			Mean score: 64.3 at 8 weeks□
			95% CI: 60.15, 68.45 Quality of life, SF-36 Mental health□
			Mean score: 69.9 at 8 weeks
			95% CI: 66.15, 73.65
			Quality of life, SF-36 Physical
			functioning
			Mean score: 57.5 at 8 weeks□
			95% CI: 52.04, 62.96
			Quality of life, SF-36 Vitality□
			Mean score: 43.7 at 8 weeks□
			95% CI: 39.73, 47.67
Serpell	RCT	Gabapentin	Quality of life, SF-36□
2002	Parallel		: Reported graphically only
UK and Republic of	Multicenter	N=153	

Study	Design	Intervention	Functional capacity
Ireland		Placebo	Quality of life, SF-36□
			: Reported graphically only
Efficacy quality: Fair		N=152	
Simpson (A) Part 1	RCT	Gabapentin	Quality of life, SF-36 Bodily Pain□
2001	Parallel	900-2700 mg	Mean score: 60 at 8 weeks (p<0.01)
us	Single Center	9	Quality of life, SF-36 Mental Health □
		N=30	Mean score: 80 at 8 weeks (p<0.01)
Efficacy quality: Fair			Quality of life, SF-36 Vitality ☐
			Mean score: 60 at 8 weeks (p<0.01)
		Placebo	Quality of life, SF-36 Bodily Pain□
			Mean score: 45 at 8 weeks
		N=30	Quality of life, SF-36 Mental Health□
			Mean score: 65 at 8 weeks
			Quality of life, SF-36 Vitality□
			Mean score: 40 at 8 weeks
		Gabapentin	Quality of life, SF-36 Bodily Pain□
		900-2700 mg	Mean score: 60 at 8 weeks (p<0.01)
		000 <u>=</u> : 00g	Quality of life, SF-36 Mental Health□
		N=30	Mean score: 80 at 8 weeks (p<0.01)
			Quality of life, SF-36 Vitality□
			Mean score: 60 at 8 weeks (p<0.01)
		Placebo	Quality of life, SF-36 Bodily Pain□
		riacebo	Mean score: 45 at 8 weeks
		N=30	Quality of life, SF-36 Mental Health□
			Mean score: 65 at 8 weeks
			Quality of life, SF-36 Vitality□
			Mean score: 40 at 8 weeks
Dworkin	RCT	Pregabalin	Quality of life, SF-36 Bodily Pain□
2003	Parallel	300-600 mg	Least squares mean: 55.14 at 8 weeks
US	Multicenter		(p=0.0021)□
		N=89	"95% CI: 50.97, 59.31
Efficacy quality: Fair			Quality of life, SF-36 General Health
			Perception
			Least squares mean: 67.61 at 8 weeks
			(p=0.0488)□
			"95% CI: 64.51, 70.71
			Quality of life, SF-36 Mental Health□
			Least squares mean: 77.53 at 8 weeks
			(p=0.0676)□
			95% CI: 74.51, 80.55
			Quality of life, SF-36 Physical
			Functioning
			Least squares mean: 62.25 at 8 weeks
			(p=0.7449)□
			"95% CI: 58.41, 66.09
			Quality of life, SF-36 Vitality□
			Least squares mean: 49.99 at 8 weeks
			(p=0.6798)□
			"95% CI: 46.29, 53.69

Study	Design	Intervention	Functional capacity
<u>,</u>	J	Placebo	Quality of life, SF-36 Bodily Pain□
			Least squares mean: 46.14 at 8 weeks□
		N=84	95% CI: 41.97, 50.31
			, i
			Quality of life, SF-36 General Health
			Perception□
			Least squares mean: 63.40 at 8 weeks□
			95% CI: 60.30, 66.50
			Quality of life, SF-36 Mental Health□
			Least squares mean: 73.73 at 8 weeks□
			95% CI: 70.71, 76.75
			Quality of life, SF-36 Physical
			Functioning
			Least squares mean: 61.41 at 8 weeks□
			95% CI: 57.69, 65.13
			Quality of life, SF-36 Vitality□
			Least squares mean: 48.94 at 8 weeks□
			95% CI: 45.26, 52.62
	DOT		0 11 111 05 00 1 111 1 5
Lesser	RCT	Pregabalin	Quality of life, SF-36 bodily pain□
2004	Parallel	75 mg	data not reported: data NR at 5 weeks
US	Multicenter	N. 77	Quality of life, SF-36 vitality□
Efficacy avality Fair		N=77	data not reported: data NR at 5 weeks
Efficacy quality: Fair		Pregabalin	(p<0.05) Quality of life, SF-36 bodily pain□
		300 mg	data not reported: data NR at 5 weeks
		300 mg	(p<0.005)
		N=81	Quality of life, SF-36 vitality□
		11-01	data not reported: data NR at 5 weeks
			(p<0.01)
		Pregabalin	Quality of life, SF-36 bodily pain□
		600 mg	data not reported: data NR at 5 weeks
			(p<0.0005)
		N=82	Quality of life, SF-36 vitality□
			data not reported: data NR at 5 weeks
			(p=NR)
		Placebo	Quality of life, SF-36 bodily pain□
			data not reported: data not reported at 5
		N=97	weeks
			Quality of life, SF-36 vitality□
			data not reported: data not reported at 5
			weeks
Richter	RCT	Pregabalin	Quality of life, SF-36 Bodily Pain□
2005	Parallel	150 mg	Least squares mean: data NR at 6
US	Multicenter	-	weeks (p<0.016)
		N=79	Quality of life, SF-36 Other domains□
Efficacy quality: Fair			Least squares mean: data NR at 6
			weeks (p=NS)

Study	Design	Intervention	Functional capacity
,		Pregabalin	Quality of life, SF-36 Bodily Pain□
		600 mg	Least squares mean: data NR at 6
		000 1119	weeks (p<0.016)
		N=82	Quality of life, SF-36 Other domains □
		11-02	Least squares mean: data NR at 6
			weeks (p=NS)
		Placebo	Quality of life, SF-36 Bodily Pain□
		Flacebo	Least squares mean: data NR at 6
		N=85	weeks
		IN-05	Quality of life, SF-36 Other domains□
			Least squares mean: data NR at 6
December	DCT	Dragabalia	weeks
Rosenstock	RCT	Pregabalin	Quality of life, SF-36 Bodily Pain
2004	Parallel	300 mg	Least squares mean: 53.83 at 8 weeks
US	Multicenter		(p=0.0294)
		N=76	95% CI: 49.44, 58.22
Efficacy quality: Fair			Quality of life, SF-36 Mental Health□
			Least squares mean: 75.82 at 8 weeks
			(p=0.1893)□
			95% CI: 72.10, 79.54
			Quality of life, SF-36 Vitality□
			Least squares mean: 46.82 at 8 weeks
			(p=0.2343)□
			95% CI: 42.98, 50.66
		Placebo	Quality of life, SF-36 Bodily Pain□
			Least squares mean: 46.96 at 8 weeks□
		N=70	95% CI: 42.31, 51.61
			Quality of life, SF-36 Mental Health□
			Least squares mean: 72.36 at 8 weeks□
			95% CI: 68.50, 76.22
			0070 01. 00.00, 70.22
			Quality of life, SF-36 Vitality□
			Least squares mean: 43.57 at 8 weeks□
			95% CI: 39.55, 47.59
Sabatowski	RCT	Pregabalin	Quality of life, SF-36 Bodily Pain□
2004	Parallel	_	Least squares mean difference from
		150 mg	·
Multiple European	Multicenter	N-04	placebo: NR at 8 weeks
and Australia		N=81	Quality of life, SF-36 Mental Health
Efficiency and allege English			Least squares mean difference from
Efficacy quality: Fair			placebo: 5.72 at 8 weeks (p=0.043)
			Quality of life, SF-36 Physical
			Functioning
			Least squares mean difference from
			placebo: NR at 8 weeks
			Quality of life, SF-36 Vitality□
			Least squares mean difference from
			placebo: NR at 8 weeks

Study	Design	Intervention	Functional capacity
		Pregabalin	Quality of life, SF-36 Bodily Pain□
		300 mg	Least squares mean difference from
			placebo: 9.58 at 8 weeks (p=0.005)
		N=76	Quality of life, SF-36 Mental Health□
			Least squares mean difference from
			placebo: 6.05 at 8 weeks (p=0.043)
			Quality of life, SF-36 Physical
			Functioning
			Least squares mean difference from
			placebo: data NR at 8 weeks
			Quality of life, SF-36 Vitality□
			Least squares mean difference from
			placebo: 7.11 at 8 weeks (p=0.044)
		Placebo	Quality of life, SF-36 Bodily Pain□
			Least squares mean difference from
		N=81	placebo: NA at 8 weeks
			Quality of life, SF-36 Mental Health□
			Least squares mean difference from
			placebo: NA at 8 weeks
			Quality of life, SF-36 Physical
			Functioning□
			Least squares mean difference from
			placebo: NA at 8 weeks
			Quality of life, SF-36 Vitality□
			Least squares mean difference from
			placebo: NA at 8 weeks
Goldstein	RCT	Duloxetine	Interference, BPI Interference- average of
2005	Parallel	20 mg daily	7 questions)□
US	Multicenter		Mean change from baseline: -1.73 at 12
		N=115	weeks (p=NS)□
Efficacy quality: Fair			95% CI: -2.06, -1.40
			Quality of life, Euro quality of life□
			Mean change from baseline: 0.10 at 12
			weeks (p=NS)□
			95% CI: 0.06, 0.14
			Quality of life, SF-36 bodily pain□
			Mean change from baseline: 13.22 at 12
			weeks (p=NS)□
			95% CI: 9.48, 16.96
			Quality of life, SF-36 Mental Health□
			Mean change from baseline: 0.74 at 12
			weeks (p=NS)□
			95% CI: -2.55, 4.03
			Quality of life, SF-36 physical □
			Mean change from baseline: 3.67 at 12
			weeks (p=NS)□
			95% CI: 2.14, 5.20

Study	Design	Intervention	Functional capacity
,		Duloxetine	Interference, BPI Interference- average of
		60 mg daily	7 questions)□
		J 11 J	Mean change from baseline: -2.33 at 12
		N=114	weeks (p≤0.01)□
			95% CI: -2.66, -2.00
			Quality of life, Euro quality of life□
			Mean change from baseline: 0.13 at 12
			weeks (p≤0.05)□
			95% CI: 0.09, 0.17
			Quality of life, SF-36 bodily pain□
			Mean change from baseline: 18.00 at 12
			weeks (p≤0.01)□
			95% CI: 14.30, 21.70
			Quality of life, SF-36 Mental Health□
			Mean change from baseline: 2.99 at 12
			weeks (p<0.05)
			95% CI: -0.24, 6.22
			Quality of life, SF-36 physical □
			Mean change from baseline: 5.86 at 12
			weeks (p=NS)□
			95% CI: 4.35, 7.37
		Duloxetine	Interference, BPI Interference-general
		60 mg BID	activity□
		Total daily dose: 120	Mean change from baseline: -2.30 at 12
		mg/d	weeks (p≤0.05)□
			95% CI: -2.65, -1.95
		N=113	Quality of life, Euro quality of life□
			Mean change from baseline: 0.13 at 12
			weeks (p≤0.05)□
			95% CI: 0.09, 0.17
			Quality of life, SF-36 bodily pain□
			Mean change from baseline: 18.32 at 12
			weeks (p≤0.01)□
			95% CI: 14.64, 22.00
			Quality of life, SF-36 Mental Health□
			Mean change from baseline: 5.14 at 12
			weeks (p<0.001)□
			95% CI: 1.96, 8.32
			Quality of life, SF-36 physical □
			Mean change from baseline: 5.85 at 12
			weeks (p=NS)□
			95% CI: 4.36, 7.34
		Placebo	Interference, BPI Interference-general
			activity□
		N=115	Mean change from baseline: -1.73 at 12
			weeks□
			95% CI: -2.06, -1.40
			Quality of life, Euro quality of life□
			Mean change from baseline: 0.08 at 12
			weeks□
			95% CI: 0.04, 0.12

Study	Design	Intervention	Functional capacity
			Quality of life, SF-36 bodily pain□
			Mean change from baseline: 10.32 at 12
			weeks□
			95% CI: 6.62, 14.02
			Quality of life, SF-36 Mental Health □
			Mean change from baseline: -2.63 at 12
			weeks□
			95% CI: -5.94, 0.68
			Quality of life, SF-36 physical □
			Mean change from baseline: 3.94 at 12
			weeks□
			95% CI: 2.43, 5.45
Raskin (B) 2005 and	RCT	Duloxetine	Interference, BPI Interference (average of
2006	Parallel	60 mg once daily	7 questions)□
2005	Multicenter	Total daily dose: 60	Mean change from baseline: -2.43 at 12
US		mg	weeks (p≤0.001)□
		3	95% CI: -2.78, -2.08
Efficacy quality: Fair		N=116	1, 11
		Duloxetine	Interference, BPI Interference (average of
		60 mg twice daily	7 questions)□
		Total daily dose: 120	Mean change from baseline: -2.54 at 12
		mg	weeks (p≤0.001)□
		, and the second	95% ČI: -2.89, -2.19
		N=116	,
		Placebo	Interference, BPI Interference (average of
			7 questions)□
		N=116	Mean change from baseline: -1.56 at 12
			weeks□
			95% CI: -1.91, -1.21
Wernicke	RCT	Duloxetine	Interference, BPI Interference average of
2006	Parallel	60 mg once daily	7 questions□
US	Multicenter	Total daily dose: 60	Mean change from baseline: -2.36 at 12
		mg	weeks (p<0.05)□
Efficacy quality: Fair			95% CI: -2.73, -1.99
		N=114	Quality of life, Euro Quality of Life (EQ-
			5D)□
			Mean change from baseline: 0.15 at 12
			weeks (p<0.05)□
			95% CI: 0.11, 0.19
			Quality of life, SF-36 Bodily Pain□
			Mean change from baseline: 15.3 at 12
			weeks (p<0.05)□
			95% CI: 11.42, 19.18
			Quality of life, SF-36 General Health□
			Mean change from baseline: 5.64 at 12
			weeks (p=NS)□
			95% CI: 2.94, 8.34
			Quality of life, SF-36 Mental Health□
			Mean change from baseline: 1.63 at 12
			weeks (p=NS)□
			95% CI: -1.27, 4.53

Study	Design	Intervention	Functional capacity
,	J		Quality of life, SF-36 Physical
			functioning
			Mean change from baseline: 11.96 at 12
			weeks (p<0.01)□
			95% CI: 8.41, 15.51
			Quality of life, SF-36 Vitality□
			Mean change from baseline: 8.47 at 12
			weeks (p=NS)□
			95% CI: 5.08, 11.86
		Duloxetine	Interference, BPI Interference average of
		60 mg twice daily	7 questions
		Total daily dose: 120	Mean change from baseline: -2.79 at 12
		mg	weeks (p<0.001)□
		9	95% CI: -3.16, -2.42
		N=112	Quality of life, Euro Quality of Life (EQ-
			5D)
			Mean change from baseline: 0.15 at 12
			weeks (p<0.05)
			95% CI: 0.11, 0.19
			Quality of life, SF-36 Bodily Pain□
			Mean change from baseline: 20.59 at 12
			weeks (p<0.01)
			95% CI: 16.59, 24.59
			Quality of life, SF-36 General Health□
			Mean change from baseline: 7.73 at 12
			weeks (p<0.01)
			95% CI: 5.01, 10.45
			Quality of life, SF-36 Mental Health□
			Mean change from baseline: 3.82 at 12
			weeks (p<0.05)□
			95% CI: 0.90, 6.74
			Quality of life, SF-36 Physical
			functioning□
			Mean change from baseline: 11.20 at 12
			weeks (p<0.01)□
			95% CI: 7.55, 14.85
			Quality of life, SF-36 Vitality□
			Mean change from baseline: 6.36 at 12
			weeks (p=NS)□
			95% CI: 2.95, 9.77
		Placebo	Interference, BPI Interference average of
			7 questions □
		N=108	Mean change from baseline: -1.72 at 12
			weeks□
			95% CI: -2.09, -1.35
			Quality of life, Euro Quality of Life (EQ-
			[5D]□
			Mean change from baseline: 0.08 at 12
			weeks□
			95% CI: 0.04, 0.12

Study	Design	Intervention	Functional capacity
			Quality of life, SF-36 Bodily Pain□
			Mean change from baseline: 12.17 at 12
			weeks□
			95% CI: 8.05, 16.29
			Quality of life, SF-36 General Health□
			Mean change from baseline: 2.39 at 12
			weeks□
			95% CI: -0.39, 5.17
			Quality of life, SF-36 Mental Health □
			Mean change from baseline: -0.31 at 12
			weeks□
			95% CI: -3.29, 2.67
			Quality of life, SF-36 Physical
			functioning□
			Mean change from baseline: 3.64 at 12
			weeks□
			95% CI: -0.08, 7.36
			Quality of life, SF-36 Vitality□
			Mean change from baseline: 2.79 at 12
			weeks□
			95% CI: -0.70, 6.28
Yucel	RCT	Venlafaxine	Daily activity, excellent, good, mild, none □
2005	Parallel	75 mg	% of patients improved: 73.68% at 6
Turkey	Single Center		weeks (p=NS)
		N=19	
Efficacy quality: Fair		Venlafaxine	Daily activity, excellent, good, mild, none □
		150 mg	% of patients improved: 47.05% at 6
			weeks (p=NS)
		N=17	Dath and the second at the
		Placebo	Daily activity, excellent, good, mild, none ☐
		N-40	% of patients improved: 42.1% at 6
		N=19	weeks

Evidence Table 7. Other outcomes in RCTs of pregabalin, gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention and study arm	Other outcomes
		characteristics	
Backonja	RCT	Gabapentin	Interference with sleep, 11-point Likert scale (0-
1999	Parallel	3600 mg	10)□
US	Multicenter		Mean score: 2.3 at 8 weeks (p<0.001)
		N=84	
Efficacy quality: Fair		Placebo	Interference with sleep, 11-point Likert scale (0-10)□
		N=81	Mean score: 3.8 at 8 weeks
Bone	RCT	Gabapentin	Depression, Hospital Anxiety & Depression Scale
2002	Crossover	2400 mg	(higher worse)□
UK and Ireland	Single Center	N=10	Median score: 12 at 6 weeks (p=NS)□ IQR: (4-22)
Efficacy quality: Fair			Interference with sleep, 11-point scale (0-10)□ Median score: 3 at 6 weeks (p=NS)□ IQR: (1-5)
		Placebo	Depression, Hospital Anxiety & Depression Scale
			(higher worse)□
		N=9	Median score: 14 at 6 weeks□
			IQR: (5-25) Interference with sleep, 11-point scale (0-10)□
			Median score: 4 at 6 weeks□ IQR: (1-5)
Gilron (A)	RCT	Gabapentin	Depression, Beck Depression Inventory (0-63)
2005	Crossover	3200 mg	Mean score: 6.4 at 5 weeks (p<0.05)□
Canada	Single Center	5200 mg	95% CI: 4.44, 8.36
Cariada	Olligic Ochter	N=48	3070 01. 4.44, 0.00
Efficacy quality: Fair		N-40	Interference with sleep, Brief Pain Inventory
Lineary quanty. I all			(Sleep, 0-10)□
			Mean score: 1.5 at 5 weeks (p<0.05)□
			95% CI: 0.72, 2.28
		Lorazepam	Depression, Beck Depression Inventory (0-63)
		1.6 mg	Mean score: 8.5 at 5 weeks□
		9	95% CI: 6.54, 10.46
		N=44	33.73 3.13 3.31, 13.13
			Interference with sleep, Brief Pain Inventory
			(Sleep, 0-10)□
			Mean score: 3.4 at 5 weeks□
			95% CI: 2.62, 4.18

Drugs for Neuropathic Pain Page 91 of 200

Evidence Table 7. Other outcomes in RCTs of pregabalin, gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention and study arm	Other outcomes
-		characteristics	
Hahn	RCT	Gabapentin	Interference with sleep, VAS (0-10)□
2004	Parallel	1200-2400 mg	% change from baseline: -48.9% at 4 weeks
Germany	Multicenter		(p=NS)
•		N=15	,
Efficacy quality: Fair			Interference with sleep, VAS (0-10)□
, , ,			Median score: 2.3 at 4 weeks (pNRvsplacebo)
		Placebo	Interference with sleep, VAS (0-10)□
		N=11	% change from baseline: -11.6% at 4 weeks
		N-11	Interference with sleep, VAS (0-10)□
			Median score: 4.95 at 4 weeks
Rice	RCT	Gabapentin	Interference with sleep, Likert scale (0-10)□
2001	Parallel	1800 mg	Difference from placebo: 0.9 at 7 weeks
UK	Multicenter		(p<0.01)□
		N=115	95% CI: 0.4-1.4
Efficacy quality: Fair		Gabapentin	Interference with sleep, Likert scale (0-10)□
		2400 mg	Difference from placebo: 1.1 at 7 weeks
			(p<0.01)□
		N=108	95% CI: 0.7-1.6
		Placebo	Interference with sleep, Likert scale (0-10)□
			Difference from placebo: NA at 7 weeks
		N=111	·
Rowbotham (D)	RCT	Gabapentin	Average daily sleep rating score, Likert scale (0-
1998	Parallel	3600 mg	10)□
US	Multicenter		Mean score: 2.4 at 8 weeks (p<0.001)□
		N=113	95% CI: 1.94, 2.86
Efficacy quality: Fair		Placebo	Average daily sleep rating score, Likert scale (0-
			10)□
		N=116	Mean score: 3.6 at 8 weeks□
			95% CI: 3.05, 4.15
Simpson (A) Part 1	RCT	Gabapentin	Interference with sleep, 11-point Likert scale (0-
2001	Parallel	900-2700 mg	10)□
US	Single Center		Mean score: data NR at 8 weeks
		N=30	(pNR(significant))
Efficacy quality: Fair		Placebo	Interference with sleep, 11-point Likert scale (0-
			10)□
		N=30	Mean score: data NR at 8 weeks

Drugs for Neuropathic Pain Page 92 of 200

Evidence Table 7. Other outcomes in RCTs of pregabalin, gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention and study arm	Other outcomes
		characteristics	
		Gabapentin	Interference with sleep, 11-point Likert scale (0-
		900-2700 mg	10)□
			Mean score: data NR at 8 weeks
		N=30	(pNR(significant))
		Placebo	Interference with sleep, 11-point Likert scale (0-10)
		N=30	Mean score: data NR at 8 weeks
Dworkin	RCT	Pregabalin	Interference with sleep, 11-point numeric scale (0-
2003	Parallel	300-600 mg	10)
US	Multicenter	occ cocg	Least squares mean: 1.93 at 8 weeks
	i i i i i i i i i i i i i i i i i i i	N=89	(p=0.0001)□
Efficacy quality: Fair		14-05	95% CI: 1.48, 2.38
Emodoy quanty. I am			Interference with sleep, Medical Outcomes Study
			Sleep Scale (higher=worse)□
			Least squares mean: 26.63 at 8 weeks
			(p=0.0001)□
			95% CI: 23.16, 30.10
		Placebo	Interference with sleep, 11-point numeric scale (0-
		Flacebo	10)□
		N=84	Least squares mean: 3.51 at 8 weeks □
		14-04	95% CI: 3.06, 3.96
			Interference with sleep, Medical Outcomes Study
			Sleep Scale (higher=worse)□
			Least squares mean: 36.43 at 8 weeks□
			95% CI: 33.00, 39.86
Freynhagen	RCT	Pregabalin	Interference with sleep, Medical Outcomes Study
2005	Parallel	150-600 mg	Sleep Scale □
Multiple European	Multicenter	130-000 mg	Mean score: Reported graphically only at 12
Multiple Lulopean	Widilicenter	N=141	weeks (p<0.001)
Efficacy quality: Fair		Pregabalin	Interference with sleep, Medical Outcomes Study
Lilicacy quality. I all		600 mg	Sleep Scale
		ooo mg	·
		N=122	Mean score: Reported graphically only at 12
		N=132 Placebo□	weeks (p<0.001) Interference with sleep, Medical Outcomes Study
		N-CF	Sleep Scale
		N=65	Mean score: Reported graphically only at 12
			weeks

Drugs for Neuropathic Pain Page 93 of 200

Evidence Table 7. Other outcomes in RCTs of pregabalin, gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention and study arm	Other outcomes
		characteristics	
Lesser	RCT	Pregabalin□	Interference with sleep, Sleep interference score□
2004	Parallel	75 mg □	Mean difference from placebo: Reported
US	Multicenter		graphically only at 5 weeks (p=NR)
		N=77	
Efficacy quality: Fair		Pregabalin	Interference with sleep, Sleep interference score □
		300 mg	Mean difference from placebo: 1.3 at 5 weeks (p=0.0001)
		N=81	
		Pregabalin	Interference with sleep, Sleep interference score □
		600 mg	Mean difference from placebo: 1.6 at 5 weeks (p=0.0001)
		N=82	
		Placebo	Interference with sleep, Sleep interference score ☐ Mean difference from placebo: NA at 5 weeks
		N=97	·
Richter	RCT	Pregabalin	Interference with sleep, 11-point numeric rating
2005	Parallel	150 mg	scale (0-10)□
US	Multicenter		Least squares mean difference: reported
		N=79	graphically only at 6 weeks (p=NS)
Efficacy quality: Fair		Pregabalin	Interference with sleep, 11-point numeric rating
		600 mg	scale (0-10)□
			Least squares mean difference: -1.152 at 6
		N=82	weeks (p=0.0004)□
			95% CI: -1.752 to -0.551
		Placebo	Interference with sleep, 11-point numeric rating scale (0-10)□
		N=85	Least squares mean: reported graphically only at
			6 weeks
Rosenstock	RCT	Pregabalin	Interference with sleep, 11-pont scale (0-10)□
2004	Parallel	300 mg	Least squares mean: 2.78 at 8 weeks
US	Multicenter		(p=0.0001)□
		N=76	95% CI: 2.25, 3.31
Efficacy quality: Fair		Placebo	Interference with sleep, 11-pont scale (0-10)□
			Least squares mean: 4.32 at 8 weeks□
		N=70	95% CI: 3.75, 4.89

Drugs for Neuropathic Pain Page 94 of 200

Evidence Table 7. Other outcomes in RCTs of pregabalin, gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention and study arm	Other outcomes
		characteristics	
Sabatowski	RCT	Pregabalin	Depression, Zung Self-Rating Depression Scale □
2004	Parallel	150 mg	Least squares mean: 47.66 at 8 weeks
Multiple European and	Multicenter		(p0.0560(adjusted))□
Australia		N=81	95% CI: 45.50, 49.82
Efficacy quality: Fair			Interference with sleep, Sleep interference score ☐ Least squares mean: 3.13 at 8 weeks (p=0.0003) ☐ 95% CI: 2.72, 3.54
		Pregabalin	Depression, Zung Self-Rating Depression Scale ☐
		300 mg	Least squares mean: 46.62 at 8 weeks (p0.024(adjusted))
		N=76	95% CI: 44.41, 48.83
			Interference with sleep, Sleep interference score Least squares mean: 2.81 at 8 weeks (p=0.0001) 95% CI: 2.38, 3.24
		Placebo	Depression, Zung Self-Rating Depression Scale ☐ Least squares mean: 50.64 at 8 weeks ☐
		N=81	95% CI: 48.48, 52.80
			Interference with sleep, Sleep interference score ☐ Least squares mean: 4.24 at 8 weeks ☐ 95% CI: 3.83, 4.65
van Seventer	RCT	Pregabalin	Interference with sleep, 11-point numerical rating
2006	Parallel	150 mg	scale (0-10)□
US and Multiple	Multicenter		Least squares mean: 3.07 at 13 weeks
European		N=87	(p=0.0007)□ 95% CI: 2.64, 3.50
Efficacy quality: Fair		Pregabalin	Interference with sleep, 11-point numerical rating
		300 mg	scale (0-10)□ Least squares mean: 2.84 at 13 weeks
		N=98	(p=0.0002)□ 95% CI: 2.43, 3.25

Drugs for Neuropathic Pain Page 95 of 200

Evidence Table 7. Other outcomes in RCTs of pregabalin, gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention and study arm	Other outcomes
		characteristics	
		Pregabalin	Interference with sleep, 11-point numerical rating
		300-600 mg	scale (0-10)□
			Least squares mean: 2.17 at 13 weeks
		N=90	(p=0.0002)□
			95% CI: 1.74, 2.60
		Placebo	Interference with sleep, 11-point numerical rating
			scale (0-10)□
		N=93	Least squares mean: 4.10 at 13 weeks□
			95% CI: 3.69, 4.51
Goldstein	RCT	Duloxetine	Depression, Beck Depression Inventory□
2005	Parallel	20 mg daily	Mean change from baseline: -2.44 at 12 weeks
US	Multicenter		(p=NS)□
		N=115	95% CI: -3.38, -1.50
Efficacy quality: Fair		Duloxetine	Depression, Beck Depression Inventory□
		60 mg daily	Mean change from baseline: -2.71 at 12 weeks
			(p=NS)□
		N=114	95% CI: -3.67, -1.75
		Duloxetine	Depression, Beck Depression Inventory□
		60 mg BID	Mean change from baseline: -3.11 at 12 weeks
		Total daily dose: 120 mg/d	(p≤0.05)□
			95% CI: -4.09, -2.13
		N=113	
		Placebo	Depression, Beck Depression Inventory□
			Mean change from baseline: -1.74 at 12 weeks□
		N=115	95% CI: -2.68, -0.80
Raskin (B) 2005 and	RCT	Duloxetine	Depression, HAM-D□
2006	Parallel	60 mg once daily	Mean change from baseline: -1.17 at 12 weeks
2005	Multicenter	Total daily dose: 60 mg	(p=NS)□
US	Mullicenter	Total daily dose. oo mg	95% CI: -1.66, -0.68
00		N=116	9370 C11.00, -0.00
Efficacy quality: Fair		Duloxetine	Depression, HAM-D□
Lineacy quality. I all		60 mg twice daily	Mean change from baseline: -0.65 at 12 weeks
		Total daily dose: 120 mg	(p=NS)□
		Total daily dosc. 120 mg	95% CI: -1.14, -0.16
		N=116	3370 Gi 1. 14, -0. 10
		IN	

Drugs for Neuropathic Pain Page 96 of 200

Evidence Table 7. Other outcomes in RCTs of pregabalin, gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention and study arm	Other outcomes
		characteristics	
		Placebo	Depression, HAM-D□
			Mean change from baseline: -0.55 at 12 weeks□
		N=116	95% CI: -1.04, -0.06
Wernicke	RCT	Duloxetine	Depression, HAM-D□
2006	Parallel	60 mg once daily	Mean change from baseline: -0.65 at 12 weeks
US	Multicenter	Total daily dose: 60 mg	(p=NS)□
			95% CI: -1.16, -0.14
Efficacy quality: Fair		N=114	
İ			Use of rescue analgesics, Median average daily
			dose: 108.7 mg at 12 weeks (p=NS)
		Duloxetine□	Depression, HAM-D□
		60 mg twice daily□	Mean change from baseline: 0.19 at 12 weeks
		Total daily dose: 120 mg□	(p<0.05)□
			95% CI: -0.32, 0.70
		N=112	
			Use of rescue analgesics, Median average daily
			dose: 23.81 mg at 12 weeks (p<0.001)
		Placebo□	Depression, HAM-D□
			Mean change from baseline: -0.64 at 12 weeks□
		N=108	95% CI: -1.15, -0.13
			Use of rescue analgesics, Median average daily
			dose: 207.14 mg at 12 weeks
Forssell	RCT	Venlafaxine□	Depression, Beck Depression Inventory (0-63)
2004	Crossove	37.5 mg once daily for 2 weeks then	Mean score: 9 at 4 weeks (p=0.16)
Finland	Multicenter	twice daily□	, , , , , , , , , , , , , , , , , , ,
		Total daily dose: 37.5 mg to 75 mg □	
Efficacy quality: Poor			
Emodoy quanty. 1 ooi		N=15	
		1.0	
		Placebo□	Depression, Beck Depression Inventory (0-63)□
			Mean score: 11 at 4 weeks
		N=15	
Tasmuth	RCT	Venlafaxine□	Depression, Beck Depression Inventory (0-63)□
2002	Crossover	37.5 mg □	Median score (range): 7 (1-27) at 4 weeks
Finland	Single Center		(p=NS)
		N=13	M/

Drugs for Neuropathic Pain Page 97 of 200

Evidence Table 7. Other outcomes in RCTs of pregabalin, gabapentin, SNRIs and topical lidocaine for neuropathic pain

Study	Design	Intervention and study arm	Other outcomes
Efficacy quality: Fair		characteristics Venlafaxine□	Depression Real Depression Inventory (0.62)
Efficacy quality: Fair			Depression, Beck Depression Inventory (0-63)
		75 mg □	Median score (range): 7 (1-39) at 4 weeks
		N=11 □	(p=NS)
		Placebo□	Depression, Beck Depression Inventory (0-63)□
		□ N=13□	Median score (range): 8 (1-22) at 4 weeks
		Placebo □ □	Depression, Beck Depression Inventory (0-63)□ Median score (range): 7 (1-11) at 4 weeks
		N=11 □	
Galer (B)	RCT	Lidocaine transdermal patch□	Use of rescue analgesics, % of patients: 9.4% at
1999	Crossover		2-14 days (p=NS)
US	Multicenter	N=32	
		Placebo□	Use of rescue analgesics, % of patients: 12.5%
Efficacy quality: Fair			at 2-14 days
		N=32	

Drugs for Neuropathic Pain Page 98 of 200

Study	Design	Type of pain/'	Intervention
		Sample size and characteristics	
Leijon	CT	Central/post-stroke neuropathic pain	Amitriptyline
1989	Crossover		25 + 50 mg BID
Sweden	Single Center	N=15	Carbamazepine
			400 mg BID
Efficacy quality: Fair		Age	Placebo
Rull	RCT	Painful diabetic neuropathy	Carbamazepine
1969	Crossover		600 mg
Mexico		N=30	
			Placebo
Efficacy quality: Fair		Age	
		Mean 54.2 (range 21-81)	
		30% male, 70% female	
Killian	RCT	Mixed	carbamazepine
1968	Crossover		600 to 800 mg
US		N=42	
			placebo
Efficacy quality: Poor			
Campbell	RCT	Trigeminal neuralgia	Carbazepine
1966	Crossover		Placebo
Dalessio	RCT	Trigeminal neuralgia	Carbazepine
1966	Crossover		600 mg
US	Single Center	N=10	Placebo
Efficacy quality: Poor			N=10
Rockliff	RCT	Trigeminal neuralgia	Carbazepine
1966	Crossover	S S	600 mg
US	Single Center	N=9	Placebo
Eisenberg	RCT	Painful diabetic neuropathy	Lamotrigine
2001	Parallel		200-400 mg
Israel	Single Center	N=53	
			Placebo
Efficacy quality: Fair		Age	
, ,		Mean (SD): 55.2	N=26
Finnerup	RCT	Spinal cord injury-related pain	Lamotrigine

Drugs for Neuropathic Pain Page 99 of 200

Study	Design	Type of pain/'	Intervention
		Sample size and characteristics	
2002	Crossover		200-400 mg
Denmark	Single Center	N=22	
Efficacy quality: Fair		Age Mean (SD): 49 Range: 27-63	Placebo
McCleane	RCT	Mixed	Lamotrigine
1999	Parallel		200 mg
UK	Single Center	N=74	Placebo
Simpson (B)	RCT	HIV-related neuropathic pain	Lamotrigine
2003	Parallel	·	400 mg
US	Multicenter	N=227	
Efficacy quality: Fair	DOT	Age Mean (SD): 44.5 Range: 26-67 Male: 89.43% Female: 10.57% White: 59.9% Black: 33.5% Other: 6.6%	Lamotrigine 600 mg Placebo
Simpson (C)	RCT	HIV-related neuropathic pain	Lamotrigine
2000	Parallel		300 mg
US	Multicenter	N=29	Placebo
Vestergaard	RCT	Central/post-stroke neuropathic pain	Lamotrigine
2001	Crossover		200 mg
Denmark	Multicenter	N=30	Placebo
Zakrzewska	RCT	Trigeminal neuralgia	Lamotrigine
1997	Crossover		400 mg

Drugs for Neuropathic Pain Page 100 of 200

Study	Design	Type of pain/'	Intervention
_		Sample size and characteristics	
UK		N=14	Placebo
Beydoun	RCT	Painful diabetic neuropathy	Oxcarbazepine
2006	Parallel		600 mg daily
US		N=347	Oxcarbazepine
			1200 mg daily
Efficacy quality: Fair		Age	Oxcarbazepine
		Mean (SD): 60.7	1800 mg daily
			Placebo
Dogra	RCT	Painful diabetic neuropathy	Oxcarbazepine
2005	Parallel		mean 1445 mg
US	Multicenter	N=146	
			Placebo
Gilron (B)	RCT	Trigeminal neuralgia	Topiramate
2001	Crossover		mean 308 mg (range 75-600 mg)
US		N=3	Placebo
Khoromi	RCT	Neuropathy associated with low back pain	Topiramate
2005	Crossover		mean 208 mg
US		N=29	Diphenhydramine
			mean 40 mg
Raskin (A)	RCT	Painful diabetic neuropathy	Topiramate
2004	Parallel		mean 320 mg
US	Multicenter	N=317	
Efficacy quality: Fair		Age	
		Mean (SD): 59.2 (9.8)	
		(-) ()	Placebo
		Male: 49.53%	
		Female: 50.47%	
		1 31114.0. 33. 11 /3	
		White: 87.4%	
		Black: 11.4%	
Thienel	RCT	Painful diabetic neuropathy	Topiramate
2004	Parallel		100 mg
Multiple	Multicenter	N=1269	Topiramate
			200 mg

Drugs for Neuropathic Pain Page 101 of 200

Study	Design	Type of pain/'	Intervention
		Sample size and characteristics	
Efficacy quality: Fair		Age	
		Mean (SD): 58.3	Topiramate
		Range: 21-81	400 mg
			Placebo
Kochar (A)□	RCT	Painful diabetic neuropathy	Valproic acid/divalproex/sodium
2002	Parallel		valproate
India	Single Center	N=52	600 mg
			Placebo
Kochar (B)	RCT	Painful diabetic neuropathy	Valproic acid/divalproex/sodium
2004	Parallel		valproate
India		N=39	500 mg
			Placebo
Efficacy quality: Fair		Age	
		Mean (SD): 55.2	
Kochar (C)	СТ	Painful diabetic neuropathy	Valproic acid/divalproex/sodium
2005	Parallel	· · · · · · · · · · · · · · · · · · ·	valproate
India	Single Center	N=40	1000 mg daily
	Jan gra a arriar		, see any
Efficacy quality: Fair		Age	
		Mean (SD): 57.24	Placebo
			. 133333
		Male: 55%	
		Female: 45%	
		Terrials. 4070	
Otto	RCT	Polyneuropathy	Valproic acid/divalproex/sodium
2004	Crossover		valproate
Denmark	0.0000.0	N=31	Placebo
Carlsson	RCT	Post-traumatic neuropathic pain	Dextromethorphan
2004	Crossover	and the second second participation of the second particip	270 mg one dose
Norway		N=15	g
,			Placebo
Efficacy quality: Fair		Age	
		Mean (SD): 41 (13)	
McQuay	RCT	Mixed	Dextromethorphan
1994	Crossover	· · · · · · · · · · · · · · · · · · ·	40.5 mg
1007	J10000 VC1		TO.O MIG

Drugs for Neuropathic Pain Page 102 of 200

Study	Design	Type of pain/'	Intervention
		Sample size and characteristics	
UK	Single Center	N=19	
Efficacy quality: Fair		Age Mean (SD): 60.6 Range: 28-80 Male: 63.16% Female: 36.84%	
			Dextromethorphan □ 81 mg
	RCT Crossover	Painful diabetic neuropathy N=13	Dextromethorphan mean 381 mg
US		Age	Placebo
Nelson (B: postherpetic neuralgia) 1997	RCT Crossover	Post-herpetic neuralgia N=13	Dextromethorphan mean 439 mg
US		Age	Placebo
Sindrup (B) 1992	RCT Crossover	Painful diabetic neuropathy	Citalopram 40 mg
Denmark	Multicenter	N=15	Placebo
Max (D) 1992	RCT Crossover	Painful diabetic neuropathy□	Fluoxetine 20-40 mg
US	NR	N=54 □	Benztropine mesylate 0.125 to 1.5 mg
Sindrup (A)	RCT	Painful diabetic neuropathy□	Paroxetine
1990	Crossover		40 mg daily
Denmark	Multicenter	N=20 □	Total daily dose: 40 mg
			Imipramine
Efficacy quality: Poor		Age□ Mean (SD): 41□	50 or 75 mg daily Total daily dose: 50 or 75 mg
		Range: 28-75□	Placebo

Drugs for Neuropathic Pain Page 103 of 200

Study	Design	Type of pain/'	Intervention
		Sample size and characteristics	
Cardenas	RCT	Spinal cord injury-related pain	Amitriptyline
2002	Parallel		10-125 mg daily
US	Multicenter	N=84	Benztropine mesylate
			0.5 mg daily
Kalso	RCT	Cancer-related neuropathic pain	Amitriptyline
1995	Crossover		50 mg
Finland	Single Center	N=15	
Efficacy quality: Fair		Age	
		Mean (SD): 56.0	
		Range: 39-72	Amitriptyline
			100 mg
		Male: 0%	
		Female: 100%	
			Placebo
Kieburtz	RCT	HIV-related neuropathic pain	Amitriptyline
1998	Parallel	·	25-100 mg
US	Multicenter	N=145	Mexiletine
			150 mg
Efficacy quality: Fair		Age	Benztropine mesylate
		Mean (SD): 40	0.125 mg
Leijon	СТ	Central/post-stroke neuropathic pain	Amitriptyline
1989	Crossover		25 + 50 mg BID
Sweden	Single Center	N=15	Carbamazepine
			400 mg BID
Efficacy quality: Fair		Age	Placebo
		Mean (SD): 66	
Max (A)	RCT	Painful diabetic neuropathy	Amitriptyline
1987	Crossover		mean 90 mg
US	Single Center	N=29	Benztropine mesylate
			1 mg
Max (C)	RCT	Post-herpetic neuralgia	Amitriptyline
1988	Crossover		12.5-150 mg (mean 65 mg)
US	Single Center	N=58	Lorazepam
			0.5-6 mg (mean 2.4 mg)

Drugs for Neuropathic Pain Page 104 of 200

Study	Design	Type of pain/'	Intervention
		Sample size and characteristics	
Efficacy quality: Fair		Age	Placebo
		Mean (SD): 72	
Robinson	RCT	Phantom limb pain	Amitriptyline
2004	Parallel		
US	Single Center	N=39	
Efficacy quality: Fair		Age	Benztropine mesylate
		Mean (SD): 44.8	
		Male: 87.2%	
Shlay	RCT	HIV-related neuropathic pain	Amitriptyline
1998	Parallel		75 mg
us	Multicenter	N=136	
Efficacy quality: Fair		Age	Placebo
		Mean (SD): 40.0	
		Male: 91.2%	
Vrethem	RCT	Polyneuropathy	Amitriptyline
1997	Crossover		75 mg
Sweden		N=36	Maprotiline
			75 mg
Efficacy quality: Fair		Age	Placebo
Watson	RCT	Post-herpetic neuralgia	Amitriptyline
1982	Crossover		75 mg (median)
Canada		N=24	Placebo
Panerai	RCT	Mixed	Nortriptyline
1990	Crossover		Chlorimipramine
Italy		N=39	Placebo

Drugs for Neuropathic Pain Page 105 of 200

Study	Design	Type of pain/'	Intervention
		Sample size and characteristics	
Raja	RCT	Post-herpetic neuralgia	Nortriptyline mean 89 mg; switched to
2002	Crossover		desipramine if not tolerated
US		N=76	
			Placebo
Efficacy quality: Fair		Age	
		Mean 71 (range 32-90)	
		45% male, 55% female	
		88% white, 11% black, 1% other	
Kishore-Kumar	RCT	Post-herpetic neuralgia	Desipramine
1990	Crossover		mean 167 mg
US	Single Center	N=26	Benztropine mesylate
			0.5-1 mg
Max (B)	RCT	Painful diabetic neuropathy□	Desipramine
1991	Crossover		
US		N=24 □	Benztropine mesylate
Sindrup (A)	RCT	Painful diabetic neuropathy	Paroxetine
1990	Crossover		40 mg daily
Denmark	Multicenter	N=20	Total daily dose: 40 mg
			Imipramine
Efficacy quality: Poor		Age	50 or 75 mg daily
		Mean (SD): 41	Total daily dose: 50 or 75 mg
		Range: 28-75	Placebo
Sindrup (C)	RCT	Painful diabetic neuropathy	Imipramine
1989	Crossover		50 or 75 mg
Denmark		N=9	Placebo
Sindrup (E)	RCT	Painful diabetic neuropathy	Imipramine
1992	Crossover		50 or 75 mg
Denmark		N=18	
			Placebo
Efficacy quality: Fair		Age	
• • •		Mean 55.8 (range 29-80)	
Hammack	RCT	Cisplatinum-induced neuropathic pain	Nortriptyline
2002	Crossover		

Drugs for Neuropathic Pain Page 106 of 200

Study	Design	Type of pain/'	Intervention
		Sample size and characteristics	
US	Multicenter	N=51	
			Placebo
Panerai	RCT	Mixed	Nortriptyline
1990	Crossover		Chlorimipramine
Italy		N=39	Placebo

Drugs for Neuropathic Pain Page 107 of 200

Study	Eligibility	Exclusion
Leijon	Unequivocal stroke episode; should seek remedy for	Known contraindication to both amitriptyline and
1989	constant or intermittent pain after stroke; pain was not	carbamazepine; could not be evaluated in a satisfactory way
Sweden	nociceptive, peripheral neuropathic or psychogenic in origin	
Efficacy quality: Fair		
Rull	Diabetic patients with well established subjective sensory	Not reported
1969	manifestations of somatic neuropathy.	
Mexico		
Efficacy quality: Fair		
Killian 1968		
US		
Efficacy quality: Poor		
Campbell	Trigeminal neuralgia, in pain at the time of entry.	"A few" patients rejected because of difficulty in attending
1966		regularly due to age, infirmity, or geography. Pain
Dalessio	Not reported	Not reported
1966		
US		
Efficacy quality: Poor		
Rockliff	Active, typical trigeminal neuralgia.	Atypical facial pain or postherpetic neuralgia.
1966		
US		
Eisenberg	1) Established diagnosis of diabetes mellitus (type 1 or	1) age younger than 18 or older than 75 years; 2) impaired
2001	2); 2) no change had been made in their	renal or liver function; 3) known epilepsy; 4) presence of other
Israel	antihyperglycemic medications within 3 weeks before	painful conditions; 5) receipt of anticonvulsants,
	screening; 3) evidence of peripheral neuropathy was	antidepressants, or membrane-stabilizing agent s for reasons
Efficacy quality: Fair	indicated by at least tow of the three following measures:	other than pain relief, or use of opioids; and 6) participation in
	a) medical history, b) neurologic examination, or c)	any clinical trial within 30 days before screening.
Finnerup	Outpatients of a rehabilitation center for spinal cord	Known concomitant cerebral damage or dementia (total score

Drugs for Neuropathic Pain Page 108 of 200

Study	Eligibility	Exclusion	
2002 Denmark Efficacy quality: Fair	injury, with neuropathic pain after traumatic spinal cord injury at or below level of spinal lesion. Other reasons for pain were either excluded or considered highly unlikely. Age 18-70 and pain intensity >=3 on a 0-10 point numeric rating scale.	fon. Other reasons fertile women with inappropriate contraception (a negative pregnancy test was required), previous serious allergic	
McCleane 1999 UK	Adult patients presenting to a Pain Clinic with intractable neuropathic pain (diagnosed on the presence of at least 3 of the cardinal symptoms of neuropathic pain-	Known sensitivity to lamotrigine or already taking an anticonvulsant.	
Simpson (B) 2003 US Efficacy quality: Fair	Aged 18 to 65 years, weighed at least 40 kg, had HIV-associated sensory neuropathy (either distal sensory polyneuropathy or antiretroviral toxic neuropathy), and scored at least 60 on the Karnofsky Performance Scale. To be characterized as having HIV-associated sensory neuropathy, patients had to have experienced symptoms of neuropathic pain in both distal lower extremities for at least 6 weeks and exhibited either diminished reflexes at the ankles compared with the knees or distal diminution of sensations of vibration, pain, or temperature in the legs, as established by a neurologist. Must have been experiencing pain in spite of previous symptomatic treatment for neuropathy		
Simpson (C)	HIV-infected subjects with distal sensory polyneuropathy	Alternative causes for neuropathy (e.g., diabetes mellitus,	
2000 US	established by a study neurologist, based on the following criteria: primary symptoms of burning or	hereditary neuropathy, or vitamin B12 deficiency) or current treatment with drugs that could be considered as contributing	
Vestergaard	Patients with a previous stroke episode and who had	Dementia or any other severe cognitive impairment, diabetic	
2001	pain for more than 3 months; older than age 18 and had	neuropathy, malignant disease, recent MI, severe heart	
Denmark	had pain following as stroke for which nociceptive,	insufficiency, liver/renal failure, or a known allergy to	
Zakrzewska	Refractory trigemina neuralgia; diagnosis made	Surgery for trigeminal neuralgia (including nerve injections but	
1997	according to the following criteria: suffering from	excluding local anesthetic injections) within the last year.	

Drugs for Neuropathic Pain Page 109 of 200

Final Evidence Tables

Drug Effectiveness Review Project

Evidence Table 8. Characteristics of placebo-controlled trials of other antidepressants, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Eligibility	Exclusion
UK	paroxysmal pain, pain was in the distribution of the	Patients with facial pain other than idiopathic trigeminal
Beydoun	Men and non-pregnant women, 18 years of age or older,	Patients with other types of pain, clinically significant medical
2006	with a diagnosis of diabetes mellitus (type 1 or 2), and	or psychiatric illnesses, a prior history of hyponatremia or non-
US	pain attributed to diabetic neuropathy for 6 months to 5	compliance, drug or alcohol abuse in the preceding year,
	years. Pain rating score of at least 50 units on a 100-	amputations other than the toes, treatment with lithium or
Efficacy quality: Fair	unit VAS at the screening visit, stable glycemic control	MAO inhibitors, previous treatment with oxcarbazepine, or a
	(as evidenced by a hemoglobin A1c level of <=11% at	history of sensitivity to carbamazepine or its metabolites.
	baseline), and baseline serum sodium levels >=35	
Dogra	Male or female outpatients, age 18 or older, established	Presence of other pain that could confound assessment of
2005	clinical diagnosis of diabetes mellitus (type 1 or 2); stable	neuropathic pain of diabetic origin; currently or had previously
US	diabetic control as evidence by a) hemoglobin A1c level	taken oxcarbazepine; presence of skin lesions that could
	<=11% at baseline; b) average HA1c over the 6 months	affect the ability to assess neuropathic pain or if they had
Gilron (B)	Idiopathic trigeminal neuralgia (which may include	Multiple sclerosis or continuous pain and dense sensory loss
2001	recurrent trigeminal neuralgia following invasive	related to an invasive procedure (i.e., anesthesia dolorosa.
US	peripheral nerve or intracranial procedures).	
Khoromi	Evidence of lumbar radiculopathy, on the basis of the	Hepatic and renal dysfunction; pregnancy or lactation; seizure
2005	presence of pain in one or both buttocks or legs for 3	disorder; pain of greater intensity in any other location than the
US	months or greater for at least 5 days a week and at least	low back or leg; narcotic abuse and/or drug or alcohol abuse
	one of the following features on the side corresponding	during the past year; fibromyalgia as defined by American
Raskin (A)	Men and women aged 18 to 75 years with a history of	Other potential causes of peripheral neuropathy (including
2004	symmetric painful diabetic neuropathy in the lower	drug-induced neuropathy), another painful condition that was
US	extremities for at least 3 months but <=10 years.	more severe than the diabetic neuropathy, a degenerative
	Diabetic neuropathy was confirmed by clinical,	neurologic diorder, open ulcer, amputation, active infection, or
Efficacy quality: Fair	electrophysiologic, or quantitative sensory testing, and	Charcot joint, a history of nephrolithiasis, attempted suicide,
	subjects were required to have maintained stable	suicidal tendencies, or substance abuse, or a clinically
	glycemic control (HbA1c <=11%) with oral	significant medical condition, including abnormal renal or
	hypoglycemics, insulin, or diet for at least 3 months	hepatic function, symptomatic coronary artery or peripheral
	before randomization. Women were required to practice	vascular disease, malignancy within the past 5 years, or major
	adequate contraception during the study or be incapable	psychiatric disorder. Subjects also ecluded if they required
	of becoming pregnant	continued treatmen with anticonvulsant or antipsychotic
		therapy, if they used acetazolamide, triamterene, zonisamide,
Thienel	Adults ages 18-75 years with type 1 or type 2 diabetes	Polyneuropathy due to causes other than diabetes, diabetic
2004	controlled by oral hypoglycemics and/or insulin or by diet	ulceration of extremities, non-traumatic amputation,
Multiple	alone, with bilateral and simultaneous symptoms of	hosptialization within past 3 months for hyper-/hypoglycemia
	painful peripheral polyneuropathy for at least 6 months.	while adherent to appropriate diabetic therapy, significant

Drugs for Neuropathic Pain Page 110 of 200

Final Evidence Tables

Drug Effectiveness Review Project

Evidence Table 8. Characteristics of placebo-controlled trials of other antidepressants, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Eligibility	Exclusion
Efficacy quality: Fair	Antidiabetic regimens had to be stable for at least 3 months before study entry; baseline dosages were to be maintained throughout the study. HbA1c levels less than 11% and creatinine clearance of at least 60 ml/min.	participaton, history of alcohol or drug abuse within previous
Kochar (A)□ 2002 India	Patients with type 2 diabetes with painful neuropathy attending the diabetes clinic at one hospital.	Liver disease, pulmonary tuberculosis, thyroid disorders, uremia, vitamin deficiency, hereditary and paraneoplastic neuropathy, alcoholism, and patients on steroid therapy.
Kochar (B) 2004 India Efficacy quality: Fair	1) Diabetes for at least 6 months on stable dosage of insulin or oral hypoglycemic agent and having reasonable diabetic control (HvA1c <11%), 2) daily neuropathic pain of at least moderate severity for >3 months, which interfered with daily activity or sleep, 3) pain intensity of >4 on a visual analogue pain scale, and	
Kochar (C) 2005 India Efficacy quality: Fair	Post-herpetic neuralgia patients in a hospital-based outpatient department; first 48 consecutive attenders who gave consent; adult patients having persistent pain for >6 months after onset of herpes zoster rash and at least 40/100mm point on visual analog scale and 4/11 point on Likert scale	Insufficient pain score on subsequent examination (visual analog scale <40) or withdrawn consent; no topical or other oral drugs during study
Otto 2004 Denmark Carlsson 2004 Norway Efficacy quality: Fair	Polyneuropathy >=6 months confirmed by electrophysiologic tests, and age >20 years. At study entry during 1-week off medication patients had a Neuropathic pain of traumatic origin.	Causes of pain other than polyneuropathy, previous allergic reactions to valproic acid, pregnancy and lactating, liver disease, thrombocytopenia, and severe terminal illness. Pregnancy, severe organ disease not associated with the pain, or used MAO inhibitors.
McQuay 1994	Patients of either sex attending the Oxford Regional Pain Relief Unit for treatment of neuropathic pain, using the	Not reported

Drugs for Neuropathic Pain Page 111 of 200

Study	Eligibility	Exclusion
UK	definition of a proven pathological process related to the	
Efficacy quality: Fair	painful area with demonstrable somatosensory dysfunction. Signs on neurological examination of a lesion of the peripheral or central nervous system, and pain symptoms in an appropriate distribution characterized by burning, shooting, or stabbing, sometimes associated with allodynia or hyperalgesia. Patients had to be able to understand the assessments.	
Nelson (A: diabetic	Age between 18 and 85 years, daily pain of at least	Presence of another more painful condition, difficulty with
neuropathy)	moderate intensity for greater than 3 months that was	ambulation, any unstable disease process, a history of
1997	present more than 50% of the day, a previous trial of a	significant substance abuse or alcoholism, liver or kidney
US	tricyclic antidepressant medication, score of 28-30 on the MMSE indicating normal cognitive function, and	disease, or concurrent use of a MAO inhibitor.
Nelson (B: postherpetic	Age between 18 and 85 years, daily pain of at least	Presence of another more painful condition, difficulty with
neuralgia)	moderate intensity for greater than 3 months that was	ambulation, any unstable disease process, a history of
1997	present more than 50% of the day, a previous trial of a	significant substance abuse or alcoholism, liver or kidney
US	tricyclic antidepressant medication, score of 28-30 on the MMSE indicating normal cognitive function, and	disease, or concurrent use of a MAO inhibitor.
Sindrup (B)	One or more symptoms (pain, paresthesia, dysesthesia,	Ankle/arm systolic blood pressure index below 0.9, and
1992	and hypesthesia) and signs (reduction of sensibility,	alcoholism.
Denmark	strength, or tendon reflexes) of peripheral neuropathy.	allocations.
Max (D)	Presence of diabetes mellitus with stable glycemic	Other pain more severe than the neuropathic pain, severe
1992	control as assessed by the patient's primary physician,	depression, postural hypotension, symptomatic coronary
US	signs of peripheral neuropathy not attributable to another	
	cause, and there months or more of daily pain of at least	
Sindrup (A)	Neurological signs of peripheral neuropathy and several	Renal or cardiac dysfunction, diagnosis of pernicious anemia,
1990	of the following symptoms for at least 1 year: pain,	reduced levels of vitamin B12 or folic acid, untreated
Denmark	paresthesia, dysesthesia, numbness, nightly	hypothyroidism, or a recent weight loss/major change in
	exacerbation, and sleep disturbances.	metabolic control.
Efficacy quality: Poor		

Drugs for Neuropathic Pain Page 112 of 200

Study	Eligibility	Exclusion
Cardenas 2002 US	Spinal cord injury more than 6 months ago; pain for at least 3 months; and average pain rating in the last month of at least 3 on a scale of 0-10.	Less than age 18 or more than 65 years of age, history of cardiovascular disease, abnormalities in a screening ECG, seizures, hyperthyroidism, or glaucoma; if female, were pregnant or unwilling to use a contraceptive during the study;
Kalso 1995 Finland Efficacy quality: Fair	Neuropathic pain following treatment for breast cancer. Pain had to be either in the anterior chest wall, and/or axilla and/or medial upper arm in an area with sensory disturbances.	Relapses or metastases of the breast cancer and clinically overt cardiac, renal, or hepatic disease.
Kieburtz 1998 US	HIV infection and clinical symptoms and signs sufficient for a diagnosis of painful neuropathy defined as 1) primary symptoms of symmetrical pain, burning or	If painful neuropathy was clearly attributable to another neuropathic drug (e.g., cisplatin, nitrofurantoin), if they were taking cardiac antiarrhythmic agents or tricyclic or tetracyclic
Efficacy quality: Fair	tingling discomfort in the feet for a least 2 weeks, and rated on the pain intensity scale as at least mild all the time or moderate for a total of at least 2 hours per day;	antidepressants, or if they had a greater than 50% change in the dosage per week of medications for ain control in the week before entry. Diabetes mellitus, documented history of cardiac
Leijon 1989 Sweden	Unequivocal stroke episode; should seek remedy for constant or intermittent pain after stroke; pain was not nociceptive, peripheral neuropathic or psychogenic in origin	Known contraindication to both amitriptyline and carbamazepine; could not be evaluated in a satisfactory way
Efficacy quality: Fair		
Max (A) 1987 US	1) symptoms and signs of diffuse, predominantly sensory neuropathy or single or multiple mononeuropathy; 2) pain during some part of every day; and 3) active diabetes or a history of diabetes, with a	1) evidence of another etiology for neuropathy; 2) another painful condition at least as severe as the neuropathic pain; 3) cognitive or language impairment revealed by difficulty in completing the pain diary, paper-and-pencil psychological
Max (C) 1988 US	1) daily pain, persisting at least 3 months after a segmental herpes zoster eruption, and 2) normal cognitive and communicative ability, as judged by performance in completing a pain diary, paper-and-	1) presence of another type of pain as severe as the postherpetic neuralgia, 2) depression severe enough (e.g., suicidal ideation) to mandate immediate treatment with tricyclic medication, and 3) medical contraindications to the use of

Drugs for Neuropathic Pain Page 113 of 200

Study	Eligibility	Exclusion	
Efficacy quality: Fair	pencil psychological tests, and telephone conversations.	amitriptyline or lorazepam.	
Robinson 2004 US Efficacy quality: Fair	Amputation more than 6 months before enrollment, pain for at least 3 months, and average pain rating in the last month of at least 2 on a scale of 0 to 10.	Less than 18 years or more than 65 years of age, history of cardiovascular disease or seizures, were pregnant, on any type of antidepressant medication, or reported consuming more than 2 alcoholic drinks per day. Those 50 years or older had a screening ECG and were excluded if they had conducting abnormalities.	
Shlay 1998 US Efficacy quality: Fair	Aged 13 or older, documented HIV infection, symptoms of HIV-related lower extremity peripheral neuropathy, diagnosed by a physician based on history and clinical exam, and have completed a baseline pain diary prior to randomization.	Being treated for an acute opportunistic infection or malignancy except nonsystemic Kaposi sarcoma, pregnant, or had taken a tricyclic antidepressant or MAO inhibitor 2 weeks before randomization.	
Vrethem 1997 Sweden Efficacy quality: Fair	Daily moderate or severe polyneuropathic pain for at least 6 months. No indication of central, nociceptive, or psychogenic pain. At least 2 of the following symptoms and signs were required for the diagnosis of polyneuropathy: distal sensory impairment (touch,	Other neurologic diseases.	
Watson 1982 Canada	Not reported	Not reported	
Panerai 1990 Italy	Men and women, in- or outpatients, aged 18-80 years, affected by central pain lasting at least 6 months following limb amputation, phantom or stump pain,	Clinically evident heart or renal failure, severe liver disease, A-V conduction disturbances or class III or IV left ventricular arrhythmias, epilepsy, glaucoma, prostatic hypertrophy,	

Drugs for Neuropathic Pain Page 114 of 200

Study	Eligibility	Exclusion
Raja 2002 US Efficacy quality: Fair	Age >18 years, pain persisting for >=3 months after the resolution of the cutaneous lesions, and typical pin intensity of >=4 (0 to 10 numerical rating scale) during the previous week.	History of substance abuse or an allergic reaction to an opioid or a tricyclic antidepressant, a myocardial infarction in the previous 3 months, cardia conduction defects, severe pulmonary disease, or encephalopathy, HIV positive, life expectancy <6 months; patients on MAO inhibitors or with severe depression precluding withdrawal from antidepressants.
Kishore-Kumar 1990 US	Postherpetic neuralgia and 1) daily pain, persisting at least 3 months after a segmental herpes zoster eruption and 2) normal cognitive and communicative ability, as judged by performance in completing a pain diary, paper-	presence of another type of pain as severe as the postherpetic neuralgia, 2) depression severe enough (e.g., suicidal ideation) to mandate immediate treatment with tricyclic medications, and 3) medical contraindications to the use of
Max (B) 1991 US	Symptoms and signs of diffuse, predominantly sensory neuropathy or single or multiple mononeuropathy; 2) daily pain, persisting at least 3	1) evidence of another etiology for neuropathy; 2) presence of another type of pain as severe as the neuropathic pain; 3) depression severe enough (e.g., suicidal ideation) to mandate
Sindrup (A) 1990 Denmark Efficacy quality: Poor	Neurological signs of peripheral neuropathy and several of the following symptoms for at least 1 year: pain, paresthesia, dysesthesia, numbness, nightly exacerbation, and sleep disturbances.	Renal or cardiac dysfunction, diagnosis of pernicious anemia, reduced levels of vitamin B12 or folic acid, untreated hypothyroidism, or a recent weight loss/major change in metabolic control.
Lineary quality: 1 col		
Sindrup (C) 1989 Denmark	Diabetics with one or more symptoms and signs of peripheral neuropathy.	Ankle/arm systolic blood pressure index below 0.8, or serum creatinine >130 mcM, suspicion of alcohol abuse or current depression.
Sindrup (E) 1992 Denmark	Pain, paresthesia, dysesthesia, nightly worsening of these symptoms, and sleep disturbance. Localization of symptoms was typical of peripheral neuropathy.	Renal or cardiac dysfunction, ankle/arm systolic blood pressure index below 0.9, megaloblastic anemia or hypothyroidism.
Efficacy quality: Fair		
Hammack 2002	Age 18 or older, have received cisplatin chemotherapy, and have had painful paresthesia for at least 1 months	History of diabetes, glaucoma, prostatism, dementia, HIV infection, major psychiatric disease, significant cardiac

Drugs for Neuropathic Pain Page 115 of 200

Study	Eligibility	Exclusion
US	attributed to cisplatin neuropathy. Required to have	disease, or postural hypotension; other identified causes of
	evidence on examination of a sensory peripheral	sensory neuropathy and paresthesia; pregnant or lactating
Panerai	Men and women, in- or outpatients, aged 18-80 years,	Clinically evident heart or renal failure, severe liver disease, A-
1990	affected by central pain lasting at least 6 months	V conduction disturbances or class III or IV left ventricular
Italy	following limb amputation, phantom or stump pain,	arrhythmias, epilepsy, glaucoma, prostatic hypertrophy,

Drugs for Neuropathic Pain Page 116 of 200

Study	Design	Intervention	Patient-reported pain
Leijon	CT	Amitriptyline	Global Impression of Change, Improved
1989	Crossover	25 + 50 mg BID	% of patients: 66.7% at 4 weeks
Sweden	Single Center	Total daily dose: 75 mg	(p<0.05)
Efficacy quality: Fair		N=15	Pain intensity, 10-step verbal rating scale
			Mean score: 4.2 at 4 weeks (p<0.05) 95% CI: 3.39, 5.01
		Carbamazepine	Global Impression of Change, Improved
		400 mg BID Total daily dose: 800 mg	% of patients: 35.7% at 4 weeks (p=NS)
		N=14	Pain intensity, 10-step verbal rating scale
			Mean score: 4.2 at 4 weeks (p=NS) 95% CI: 3.31, 5.09
		Placebo	Global Impression of Change, Improved % of patients: 6.7% at 4 weeks
		N=15	
			Pain intensity, 10-step verbal rating scale
			Mean score: 5.3 at 4 weeks 95% CI: 4.29, 6.31
Campbell 1966	RCT Crossover	Carbazepine	Improvement, % change on a numeric scale (0-3)
England	Crossover□	N=36	Mean change from baseline: 58% at 2 weeks (p<0.01)
Efficacy quality: Poor		Placebo	Improvement, % change on a numeric scale (0-3)
		N=34	Mean change from baseline: 26% at 2 weeks
Dalessio	RCT□	Carbazepine	Pain relief, Significant change in pain
1966	Crossover□	600 mg	(not defined)
US	Single Center	N=10	% of patients: 100% at 3 days (p<0.002)
Efficacy quality: Poor		Placebo	Pain relief, Significant change in pain
		N=10	(not defined) % of patients: 0% at 3 days
Rockliff	RCT□	Carbazepine	Response, Patients preferring
1966	Crossover	600 mg	carbamazepine
US	Single Center	N=9	% of patients: 88.9% at 24 hours (p=NR)
Efficacy quality: Poor		Placebo	Response, Patients preferring placebo
Emodey quality: 1 ooi		N=9	% of patients: 0% at 24 hours
Eisenberg	RCT 🗆	Lamotrigine	Average pain intensity, numerical scale
2001	Parallel	200-400 mg	(0-10)
Israel	Single Center		Mean score: 4.2 at 6 weeks
Efficacy quality: Fair		N=27	(pNR,significantat200,300,and400mg) 95% CI: 4.16, 4.24

Study	Design	Intervention	Patient-reported pain
			Average pain, McGill Pain
			Questionnaire, words
			Mean score: 12.5 at 6 weeks (p=NS)
			95% CI: 12.16, 12.84
			Response, 50% or greater reduction in pain % of patients: 44.4% at 6 weeks (p=0.05)
		Placebo	Average pain intensity, numerical scale (0-10)
		N=26	Mean score: 5.3 at 6 weeks 95% CI: 5.26, 5.34
			Average pain, McGill Pain Questionnaire, words Mean score: 10.7 at 6 weeks
			Null Type field
			Response, 50% or greater reduction in pain
F:	DOT	L a constriction o	% of patients: 19.2% at 6 weeks
Finnerup	RCT	Lamotrigine	Average daily pain score, Numeric
2002	Crossover	200-400 mg	rating scale (0-10)
Denmark	Single Center		Median change from baseline: 1 at 9
		N=30	weeks (p=0.11)
Efficacy quality: Fair			Pain, McGill Pain Questionnaire Median score: 19 at 9 weeks (p=0.76)
			Pain, McGill Pain Questionnaire, words chosen
			Median score: 11 at 9 weeks (p=0.81)
			Response, Moderate or greater pain relief
			% of patients: 31.8% at 9 weeks (p=0.06)
		Placebo	Average daily pain score, Numeric rating scale (0-10)
		N=30	Median change from baseline: 0 at 9 weeks
			Pain, McGill Pain Questionnaire Median score: 18.5 at 9 weeks
			Pain, McGill Pain Questionnaire, words
			chosen Median score: 9 at 9 weeks
			Response, Moderate or greater pain relief
			% of patients: 13.6% at 9 weeks
McCleane	RCT	Lamotrigine	Pain, VAS (0-10)
1999	Paralle	200 mg	Mean change from baseline: -0.01 at 8
UK	Single Center		weeks (p=NS)
		N=36	

Study	Design	Intervention	Patient-reported pain
Efficacy quality: Poor		Placebo	Pain, VAS (0-10)
			Mean change from baseline: 0.03 at 8
		N=38	weeks
Simpson (B)	RCT	Lamotrigine	Average daily pain score, Gracely pain
2003	Parallel	400 mg	score
US	Multicenter	400 mg	Mean change from baseline: -0.27 at
03	Mullicenter	N-60	_
- <i>cc</i>		N=62	11 weeks (p=NS)
Efficacy quality: Fair			Average pain, McGill Pain Assessment
			Mean change from baseline: -6.9 at 11
			weeks (p<0.05)
			Global Impression of Change, Marked
			or moderate improvement
			% of patients: 53% at 11 weeks
			(p<0.05 for marked)
			Pain intensity, VAS (0-100)□
			Mean change from baseline: -27.1 at
			11 weeks (p<0.05)
			Response, at least 30% reduction in
			VAS
			% of patients: 57% at 11 weeks
			(p<0.05)
		Lamatriaina	Average daily pain score, Gracely pain
		Lamotrigine	
		600 mg	score
			Mean change from baseline: -0.30 at
		N=88	11 weeks (p=NS)
			Average pain, McGill Pain Assessment
			Mean change from baseline: -6.8 at 11
			weeks (p=NS)
			Global Impression of Change, Marked
			or moderate improvement
			% of patients: 60% at 11 weeks
			(p=NS)
			Pain intensity, VAS (0-100)
			Mean change from baseline: -23.3 at
			11 weeks (p=NS)
			Response, at least 30% reduction in
			VAS
			% of patients: 52% at 11 weeks
			(p=NS)
		Placebo	Average daily pain score, Gracely pain
		i iaceso	
		N=20	Score
		N=30	Mean change from baseline: -0.10 at
			11 weeks
			Average pain, McGill Pain Assessment
			Mean change from baseline: -1.6 at 11
			weeks

Study	Design	Intervention	Patient-reported pain
,			Global Impression of Change, Marked
			or moderate improvement
			% of patients: 30% at 11 weeks
			Pain intensity, VAS (0-100)
			Mean change from baseline: -9.0 at 11
			weeks
			Response, at least 30% reduction in
			VAS
			% of patients: 23% at 11 weeks
		Placebo	Average daily pain score, Gracely pain
		1 lacebo	score
		N=47	
		N=47	Mean change from baseline: -0.27 at
			11 weeks
			Average pain, McGill Pain Assessment
			Mean change from baseline: -8.7 at 11
			weeks
			Global Impression of Change, Marked
			or moderate improvement
			% of patients: 45% at 11 weeks
			Pain intensity, VAS (0-100)
			Mean change from baseline: -21.3 at
			11 weeks
			Response, at least 30% reduction in VAS
			% of patients: 45% at 11 weeks
Simpson (C)	RCT	Lamotrigine	Average pain, Gracely pain score (log
2000	Parallel	300 mg	10)
US	Multicenter		Mean score: 0.52 at 14 weeks
		N=20	(p=0.05)
Efficacy quality: Fair		5	95% CI: 0.36, 0.68
			Severity of pain, Worst pain (Gracely
			pain score, log 10)
			Mean change from baseline: -0.63 at
			14 weeks (p=0.17)
			95% CI: -0.70, -0.56
		Placebo	Average pain, Gracely pain score (log
			10)
		N=22	Mean score: 0.88
		==	95% CI: 0.69, 1.07
			Severity of pain, Worst pain (Gracely
			pain score, log 10)
			Mean change from baseline: -0.35
			95% CI: -0.40, -0.30
Vestergaard	RCT	Lamotrigine	Average pain, Likert scale (0-10)
2001	Crossover	200 mg	Median score: 5 at 8 weeks (p=0.01)
Denmark	Multicenter		(F 310 1)
		N=30	Global Pain Rating, 0-5
Efficacy quality: Fair			Median score: 3 at 8 weeks (p=0.02)
ous, quality. I all			Range: 1-5
			95 5

Study	Design	Intervention	Patient-reported pain
		Placebo	Average pain, Likert scale (0-10)
			Median score: 7 at 8 weeks
		N=30	Global Pain Rating, 0-5
			Median score: 4 at 8 weeks
			Range: 2-5
Zakrzewska	RCT	Lamotrigine	Average daily pain score, Reported
1997	Crossover	400 mg	graphically only
UK			Global Impression of Improvement,
		N=14	Composite efficacy index
Efficacy quality: Fair			% of patients preferring lamotrigine:
			85% at 2 weeks
			95% CI: 61%-97%
			Improvement, Pain better or much
			better
			% of patients: 76.9% at 2 weeks
			(p=NR)
		Placebo	Average daily pain score, Reported
			graphically only
		N=14	Improvement, Pain better or much
			better
			% of patients: 57.1% at 2 weeks
Beydoun	RCT	Oxcarbazepine	Average daily pain score, VAS (0-100)
2006	Parallel	600 mg daily	Mean change from baseline: -25.9 at
US			16 weeks (p=NS)
		N=83	
Efficacy quality: Fair			Global Impression of Change, Much or
			very much improved
			% of patients: 36.4% at 16 weeks
			(p=NS)
		Oxcarbazepine	Average daily pain score, VAS (0-100)
		1200 mg daily	Mean change from baseline: -29.0 at
			16 weeks (p=NS)
		N=87	
			Global Impression of Change, Much or
			very much improved
			% of patients: 50.0% at 16 weeks
			(p=NS)
		Oxcarbazepine	Average daily pain score, VAS (0-100)
		1800 mg daily	Mean change from baseline: -26.5 at
			16 weeks (p=NS)
		N=88	
			Global Impression of Change, Much or
			very much improved
			% of patients: 49.3% at 16 weeks
			(p=NS)
		Placebo	Äverage daily pain score, VAS (0-100)
			Mean change from baseline: -19.1 at
	1	11.00	_
		N=89	16 weeks

Study	Design	Intervention	Patient-reported pain
•			Global Impression of Change, Much or
			very much improved
			% of patients: 37.3% at 16 weeks
Dogra	RCT	Oxcarbazepine	Average daily pain score, VAS (0-100)
2005	Parallel	mean 1445 mg	Mean change from baseline: -24.3 at
US	Multicenter	in a mag	16 weeks (p=0.0108)
	Wildia Goritor	N=69	95% CI: -30.72, -17.88
Efficacy quality: Fair			5575 GH. 55.7 <u>2</u> , 11.55
Emodoy quality. I all			Response, 30% or greater decrease in VAS
			% of patients: 45.6% at 16 weeks (p=0.0288)
			Response, 50% or greater decrease in VAS
			% of patients: 35.2% at 16 weeks (p=0.0156)
		Placebo	Average daily pain score, VAS (0-100) Mean change from baseline: -14.7 at
		N=77	16 weeks
			95% CI: -20.60, -8.80
			Response, 30% or greater decrease in VAS
			% of patients: 28.9% at 16 weeks
			Response, 50% or greater decrease in VAS
			% of patients: 18.4% at 16 weeks
Gilron (B)	RCT	Topiramate	Average daily pain score, 0-10
2001	Crossover	mean 308 mg (range 75-600	Mean score: 2.4 at 12 weeks (p=0.04)
US	0.0000.0	mg)	Range: 1.0-4.5
Efficacy quality: Poor		N=3	
		Placebo	Average daily pain score, 0-10 Mean score: 4.1 at 12 weeks (p=0.04)
		N=3	Range: 2.8-6.6
Khoromi	RCT	Topiramate	Average pain (leg), numeric (0-10)
2005 US	Crossover	mean 208 mg	Mean score: 3.06 at 2 weeks (p=0.06)
		N=29	Global Impression of Change, Moderate
Efficacy quality: Fair			or greater pain relief
, ,			% of patients: 54% at 2 weeks
			(p=0.005)
		Diphenhydramine	Average pain (leg), numeric (0-10)
		mean 40 mg	Mean score: 3.8 at 2 weeks
			Global Impression of Change, Moderate
		N=29	or greater pain relief
			% of patients: 23% at 2 weeks

Design	Intervention	Patient-reported pain
		Global Impression of Efficacy, Good,
	•	very good, or excellent efficacy
	mean 320 mg	• •
wullicenter	N. 000	% of patients: 53.8% at 12 weeks
	N=208	(p=NR)
		Pain intensity (current pain), 5-point
		numeric scale (1-5)
		Mean score: data reported graphically
		only at 12 weeks (p=0.093)
		Pain intensity (worst pain), 5-point
		numeric scale (1-5)
		Mean score: data reported graphically
		only at 12 weeks (p=0.003)
		Pain intensity, VAS (0-100)
		Mean score: 46.2 at 12 weeks
		(p=0.038)
		Response, >30% decrease in VAS
		% of patients: 49.5% at 12 weeks
		(p=0.004)
		Response, >50% decrease in VAS
		% of patients: 35.6% at 12 weeks
		(p=0.005)
	Placebo	Global Impression of Efficacy, Good,
	1.43333	very good, or excellent efficacy
	N=109	% of patients: 33.9% at 12 weeks
	14 100	Pain intensity (current pain), 5-point
		numeric scale (1-5)
		Mean score: data reported graphically
		only at 12 weeks
		Pain intensity (worst pain), 5-point
		numeric scale (1-5)
		Mean score: data reported graphically
		,
		only at 12 weeks
		Pain intensity, VAS (0-100)□
		Mean score: 54.0 at 12 weeks
		Response, >30% decrease in VAS
		% of patients: 33.9% at 12 weeks
		Response, >50% decrease in VAS
	<u> </u>	% of patients: 21.1% at 12 weeks
	•	Average pain, VAS (0-100)
	100 mg	Mean score (Study 001): 36.1 at 18
Multicenter		weeks (p=0.043)
	N=253	95% CI: 32.63, 39.57
		Average pain, VAS (0-100)
		Mean score (Study 003): 44.7 at 22
		weeks (p=0.156)
		95% CI: 41.06, 48.34
	RCT Parallel Multicenter RCT Parallel Multicenter	RCT Topiramate mean 320 mg Multicenter N=208 Placebo N=109 RCT Topiramate 100 mg Multicenter 100 mg

Study	Design	Intervention	Patient-reported pain
		Topiramate	Average pain, VAS (0-100)
		200 mg	Mean score (Study 001): 38.3 at 18
			weeks (p=0.138)
		N=372	95% ČI: 35.41, 41.19
			Average pain, VAS (0-100)
			Mean score (Study 002): 37.8 at 22
			weeks (p=0.247)
			95% CI: 34.91, 40.69
			Average pain, VAS (0-100)
			Mean score (Study 003): 44.7 at 22
			weeks (p=0.096)
			95% CI: 41.78, 47.62
		Topiramate	Average pain, VAS (0-100)
		400 mg	Mean score (Study 001): 39.7 at 18
		400 mg	, , ,
		N-260	weeks (p=0.612)
		N=260	95% CI: 36.43, 42.97
			Average pain, VAS (0-100)
			Mean score (Study 002): 39.3 at 22
			weeks (p=0.482)
			95% CI: 36.10, 42.50
		Placebo	Average pain, VAS (0-100)
			Mean score (Study 001): 43.1 at 18
		N=384	weeks
			95% CI: 40.35, 45.85
			Average pain, VAS (0-100)
			Mean score (Study 002): 41.6 at 22
			weeks
			95% CI: 38.74, 44.46
			Average pain, VAS (0-100)
			Mean score (Study 003): 55.3 at 22
			weeks
			95% CI: 53.19, 57.41
Kochar (A)	RCT□	Valproic	Pain, McGill Pain Score
2002	Parallel□	acid/divalproex/sodium	Mean score: 3.41 at 4 weeks
India	Single Center	valproate	(p=0.028)
	3	600 mg	95% CI: 2.73, 4.09
Efficacy quality: Fair		o o o o o o o o o o o o o o o o o o o	, , , , , , , , , , , , , , , , , , , ,
		N=29	
		Placebo	Pain, McGill Pain Score
		1 10000	Mean score: 4.6 at 4 weeks
		N=28	95% CI: 3.81, 5.39
Kochar (B)	RCT□	Valproic	Pain intensity, Present Pain Intesity
2004	Parallel	acid/divalproex/sodium	Mean score: 1.33 at 3 months
India		valproate	(p<0.001)
iiiula		500 mg	95% CI: 0.04, 2.62
Efficacy quality Fair		Journal of the state of the sta	·
Efficacy quality: Fair		N-22	Pain, SF-McGill Pain Questionnaire
		N=22	Mean score: 9.66 at 3 months
			(p<0.001)
			95% CI: -2.02, 21.34

Study	Design	Intervention	Patient-reported pain
			Pain, VAS (0-10)
			Mean score: 3.0 at 3 months (p<0.001)
			95% CI: -1.16, 7.16
			3676 31. 11.16, 71.16
		Placebo	Pain intensity, Present Pain Intesity
			Mean score: 2.61 at 3 months
		N=21	95% CI: 0.81, 4.41
			Pain, SF-McGill Pain Questionnaire
			Mean score: 17.88 at 3 months
			95% CI: 7.26, 28.50
			Pain, VAS (0-10)
			Mean score: 6.0 at 3 months
			95% CI: 2.39, 9.61
Kochar (C)	CT	Valproic	Pain intensity, Present Pain Intensity□
2005	Parallel□	acid/divalproex/sodium	Mean score: 1.95 at 8 weeks
India	Single Center	valproate	(p<0.0001)□
	Jan 3 a a a a a a a a a a a a a a a a a a	1000 mg daily	95% CI: -0.58, 4.48
Efficacy quality: Fair		roos mg aany	0070 0 0.00, 10
		N=23	Pain, 11-point Likert scale (0-10)□
			Mean score: 3.63 at 8 weeks
			(p<0.0001)□
			95% CI: -0.96, 8.22
			Pain, SF-McGill Pain Questionnaire
			Mean score: 11.9 at 8 weeks
			(p<0.0001)
			"
			95% CI: -0.88, 24.68
			Pain, VAS (0-100)
			Mean score: 31.27 at 8 weeks
			(p<0.0001)
			95% CI: -27.12, 89.66
			Response, At least 50% pain relief
			% of patients: 59.1% at 8 weeks
			(p=NR)
		Placebo	Pain intensity, Present Pain Intensity
			Mean score: 3.22 at 8 weeks
		N=22	95% CI: 1.26, 5.18
			Pain, 11-point Likert scale (0-10)
			Mean score: 5.33 at 8 weeks
			95% CI: 2.04, 8.62
			Pain, SF-McGill Pain Questionnaire
			Mean score: 16.11 at 8 weeks
			95% CI: 9.45, 22.77
			Pain, VAS (0-100)
			Mean score: 54.94 at 8 weeks
			95% CI: 20.58, 89.30
			Response, At least 50% pain relief
			% of patients: 11.1% at 8 weeks
Otto	RCT□	Valproic	Pain relief, Complete, good, or
2004	Crossover□	acid/divalproex/sodium	moderate relief
Denmark		valproate	% of patients: 9.7% at 4 weeks
	1	1500 mg	(p=0.13)

Study	Design	Intervention	Patient-reported pain
Efficacy quality: Fair			Pain, Numeric scale (0-10)
		N=37	Median score: 5 at 4 weeks (p=0.24)
			Range: 2-10
			. tanger = 10
		Placebo	Pain relief, Complete, good, or
		1 133333	moderate relief
		N=37	% of patients: 25.8% at 4 weeks
			Pain, Numeric scale (0-10)
			Median score: 6 at 4 weeks
			Range: 1-10
Carlsson	RCT□	Dextromethorphan	Pain intensity, VAS (0-100 mm)
2004	Crossover	270 mg one dose	Mean reduction from baseline: 30% at
Norway	Ciossovei	270 mg one dose	4 hours (p=NR)
l		N=15	Pain intensity, VAS (0-100 mm)
Efficacy quality: Fair		14-15	Mean reduction from baseline: data
Lineacy quality. I all			not reported, superior to placebo at 1.5
			hours (p<0.05)
			Pain intensity, VAS (0-100 mm)
			Mean reduction from baseline: data
			not reported, superior to placebo at 2.5-
		Discobs	4 hours (p<0.0002)
		Placebo	Pain intensity, VAS (0-100 mm)
		N. 45	Mean reduction from baseline: data
		N=15	not reported at 1.5 hours
			Pain intensity, VAS (0-100 mm)
			Mean reduction from baseline: data
			not reported at 2.5-4 hours
			Pain intensity, VAS (0-100 mm)
			Mean reduction from baseline: data
			not reported at 4 hours
McQuay	RCT□	Dextromethorphan	Current pain intensity, VAS (0-100)
1994	Crossover□	40.5 mg	Mean score: 57 at 10 days
UK	Single Center		(pNS(vsplacebodays))□
		N=19	95% CI: 45.24, 68.76
Efficacy quality: Fair			Current pain intensity, Verbal rating
			scale (0, 1, 2, 3)
			Mean score: 2.3 at 10 days
			(pNS(vsplacebodays))
			95% CI: 1.91, 2.69
			Current Pain intensity, Verbal rating
			scale (0-7)
			Mean score: 5 at 10 days (p NS vs
			placebo days)
			95% CI: 4.61, 5.39
			Current Pain relief, VAS (0-100)□
			Mean score: 0.5 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 0.11, 0.89

Study	Design	Intervention	Patient-reported pain
			Global Rating of Treatment, Verbal
			rating scale (0-4)□
			Mean score: 0.4 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 0.20, 0.60
			Pain intensity, McGill No of Words□
			Mean score: 13 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 11.04, 14.96
			Pain intensity, McGill Total score □
			Mean score: 27 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 21.12, 32.88
			Typical pain intensity, VAS (0-100)□
			Mean score: 70 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 62.16, 77.84
			Typical pain intensity, Verbal rating
			scale (0, 1, 2, 3)□
			Mean score: 2.5 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 2.11, 2.89
			Typical Pain intensity, Verbal rating
			scale (0-7)□
			Mean score: 5 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 4.22, 5.78
			Typical Pain relief, VAS (0-100)□
			Mean score: 0.6 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 0.21, 0.99
		Dextromethorphan	Current pain intensity, VAS (0-100)□
		81 mg	Mean score: 50 at 10 days
			(pNS(vsplacebodays))□
		N=17	95% CI: 38.24, 61.76
			Current pain intensity, Verbal rating
			scale (0, 1, 2, 3)□
			Mean score: 2 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 1.61, 2.39
			Current Pain intensity, Verbal rating
			scale (0-7)□
			Mean score: 4 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 3.22, 4.78
			Current Pain relief, VAS (0-100)□
			Mean score: 0.3 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 0.10, 0.50

Study	Design	Intervention	Patient-reported pain
			Global Rating of Treatment, Verbal
			rating scale (0-4)□
			Mean score: 0.5 at 10 days
			(pNS(vsplacebodays))□
			"95% CI: 0.11, 0.89
			Pain intensity, McGill No of Words□
			Mean score: 11 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 9.04, 12.96
			Pain intensity, McGill Total score □
			Mean score: 25 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 19.12, 30.88
			Typical pain intensity, VAS (0-100)□
			Mean score: 56 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 44.24, 67.76
			Typical pain intensity, Verbal rating
			scale (0, 1, 2, 3)
			Mean score: 2.4 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 2.20, 2.60
			Typical Pain intensity, Verbal rating
			_ · · · · · · · · · · · · · · · · · · ·
			scale (0-7)
			Mean score: 5 at 10 days
			(pNS(vsplacebodays))□
			95% CI: 4.41, 5.59
			Typical Pain relief, VAS (0-100)□
			Mean score: 0.7 at 10 days
			(pNS(vsplacebodays))□
Nieleen (A. dieleetie	DOT	Day the reath and bar	95% CI: 0.11, 1.29
Nelson (A: diabetic	RCT	Dextromethorphan	Global Impression of Change, A lot or
neuropathy)	Crossover□	mean 381 mg	moderate relief□
1997		N. 44	% of patients: 53.8% at 6 weeks
US		N=14	(p=NR)
Efficacy avality Fair			Global Impression of Change,
Efficacy quality: Fair			Categorical scale (0-4)□
			Mean score: 2.7 at 6 weeks
			(p=0.002)□
			Improvement, 13-item descriptor scale□
			Mean difference from placebo (%):
			. ,
			24% at 6 weeks (p=0.014)□ 95% CI: 6%-42%
			95 /0 OI. 070-42 70
		Placebo	Global Impression of Change, A lot or
		1 140000	moderate relief□
		N=14	% of patients: 0% at 6 weeks
		I	Global Impression of Change,
			Categorical scale (0-4)□
			Mean score: 1.3 at 6 weeks
	1		ויובמוז שנטוב. ו.ש מנט שבבתש

Study	Design	Intervention	Patient-reported pain
Nelson (B:	RCT	Dextromethorphan	Global Impression of Change, A lot or
postherpetic	Crossover□	mean 439 mg	moderate relief□
neuralgia)			% of patients: 38.5% at 6 weeks
1997		N=18	(p=NR)
US			Global Impression of Change,
			Categorical scale (0-4)□
Efficacy quality: Fair			Mean score: 2.2 at 6 weeks (p=NS)□
			Improvement, 13-item descriptor scale
			·
			Mean difference from placebo (%): 2%
			at 6 weeks (p=0.72)□
			95% CI: 10%-14%
		Placebo	Global Impression of Change, A lot or
			moderate relief□
		N=18	% of patients: 23.1% at 6 weeks
			Global Impression of Change,
			Categorical scale (0-4)□
			Mean score: 1.7 at 6 weeks
Sindrup (B)	RCT□	Citalopram	Total neuropathy score, See
1992	Crossover□	40 mg	comments⊓
Denmark	Multicenter	10 1119	Median score: 4.5 at 3 weeks
Definition	Matticentei	N=18	(p=0.02)□
Efficacy quality Fair		N-10	" '
Efficacy quality: Fair		Discolor	Range: 1.5-7.75
		Placebo	Total neuropathy score, See
			comments
		N=18	Median score: 7.0 at 3 weeks□
			Range: 1.0-10.5
Max (D)	RCT□	Fluoxetine	Pain intensity, Verbal descriptors□
1992	Crossover□	20-40 mg	Mean change from baseline: Reported
us	NR		graphcally only at 6 weeks (p=NS)
		N=54	
Efficacy quality: Fair			Pain relief, Complete, a lot, or moderate
			relief
			% of patients: 48% at 6 weeks (p=NS)
			70 of patients. 40 70 at 0 weeks (p=143)
		Benztropine mesylate	Pain intensity, Verbal descriptors□
		0.125 to 1.5 mg	Mean change from baseline: Reported
			graphcally only at 6 weeks
		N=54	Pain relief, Complete, a lot, or moderate
			relief□
			% of patients: 41% at 6 weeks
Sindrup (A)	RCT□	Paroxetine	Pain, VAS (100 mm)□
1990	Crossover□	40 mg daily	Median score: 81.5 at 2 weeks
Denmark	Multicenter		(p=0.0121)
		N=29	W /
Efficacy quality: Poor		Imipramine	Pain, VAS (100 mm)□
Lineacy quality. 1 001		50 or 75 mg daily	Median score: 37.0 at 2 weeks
		Jo of 75 mg daily	
		N=20	(p=0.0002)
		N=29	

Study	Design	Intervention	Patient-reported pain
		Placebo	Pain, VAS (100 mm)□
			Median score: 141.5 at 2 weeks
		N=29	
Cardenas	RCT□	Amitriptyline	Interference with activities, BPI□
2002	Parallel□	10-125 mg daily	Mean score: 29.8 at 6 weeks (p=NS)□
US	Multicenter		95% CI: 23.18, 36.42
		N=44	
Efficacy quality: Fair			Pain intensity, API (0-10)□
			Mean score: 4.5 at 6 weeks (p=NS)□
			95% CI: 3.94, 5.06
		Benztropine mesylate	Interference with activities, BPI□
		0.5 mg daily	Mean score: 22.2 at 6 weeks□
			95% CI: 19.94, 24.46
		N=40	Pain intensity, API (0-10)□
			Mean score: 4.0 at 6 weeks□
			95% CI: 3.38, 4.62
Kalso	RCT□	Amitriptyline	Pain intensity, VAS (10 cm)□
1995	Crossover□	50 mg	Median score (breast scar area): 1.8 at
Finland	Single Center		1 week (pNSvsbaseline)□
		N=15	Range: 0-5.1
Efficacy quality: Fair			Pain intensity, VAS (10 cm)□
			Median score (ipsilateral arm): 1.9 at 1
			week (pNSvsbaseline)□
			Range: 0-9.1
			Pain intensity, VRS (8-point)□
			Median score (breast scar area): 2.2 at
			1 week (pNSvsbaseline)□
			Range: 1-5
			Pain intensity, VRS (8-point)□
			Median score (ipsilateral arm): 2.6 at 1
			week (pNSvsbaselne)□
			Range: 1-5
			Pain relief, VRS (5-point)□
			Median score (breast scar area): 3.0 at
			1 week (pNSvsbaseline)□
			Range: 1-5
			Pain relief, VRS (5-point)□
			Median score (ipsilateral arm): 3.0 at 1
			week (pNSvsbaseline)□
			Range: 1-5
		Amitriptyline	Pain intensity, VAS (10 cm)□
		100 mg	Median score (breast scar area): 0.2 at
			1 week (p=NS)□
		N=15	Range: 0-4.3
			Pain intensity, VAS (10 cm)□
			Median score (ipsilateral arm): 0.5 at 1
			week (p<0.05)□
			Range: 0-30

Study	Design	Intervention	Patient-reported pain
			Pain intensity, VRS (8-point)□
			Median score (breast scar area): 1.9 at
			1 week (p<0.05)□
			Range: 1-5
			Pain intensity, VRS (8-point)□
			Median score (ipsilateral arm): 1.8 at 1
			week (p<0.05)□
			Range: 1-4
			Pain relief, VRS (5-point)□
			Median score (breast scar area): 3.0 at
			1 week (p<0.05)□
			Range: 2-5
			Pain relief, VRS (5-point)□
			Median score (ipsilateral arm): 3 at 1
			week (p<0.05)
			Range: 2-5
			Pain, MPQ Total score □
			Median score (breast scar region):
			1151 at 1 week (p<0.05)
			Pain, MPQ Total score □
			Median score (ipsilateral arm): 1757 at
			1 week (p<0.01)
		Placebo	Pain intensity, VAS (10 cm)□
			Median score (breast scar area): 2.6 at
		N=15	1 week□
			Range: 0-6.6
			Pain intensity, VAS (10 cm)□
			Median score (ipsilateral arm): 2.5 at 1
			week□
			Range: 0-9.2
			Pain intensity, VRS (8-point)□
			Median score (breast scar area): 2.3 at
			1 week□
			Range: 1-4
			Pain intensity, VRS (8-point)□
			Median score (ipsilateral arm): 3.1 at 1
			week
			Range: 1-8
			Pain relief, VRS (5-point)□
			Median score (breast scar area): 1 at 1
			week
			Range: 1-5
			Pain relief, VRS (5-point)□
			Median score (ipsilateral arm): 1 at 1
			week
			Range: 1-5
			Pain, MPQ Total score
			Median score (breast scar region):
			3221 at 1 week

Study	Design	Intervention	Patient-reported pain
			Pain, MPQ Total score □
			Median score (ipsilateral arm): 2766 at
			1 week
Kieburtz	RCT□	Amitriptyline	Global Impression of Change,
1998	Parallel□	25-100 mg	Moderate, a lot, or complete relief□
US	Multicenter		% of patients: 50% at Week 8
	Widitioonto	N=47	(p=0.164)
Efficacy quality: Fair			Pain intensity, Gracely Pain Scale□
Lineary quanty: 1 an			Mean change from baseline: 0.31 at
			Week 8 (p=0.38)□
			95% CI: 0.21, 0.41
		Mexiletine	Global Impression of Change,
		150 mg	Moderate, a lot, or complete relief□
		130 mg	% of patients: 45.8% at Week 8
		N=48	Pain intensity, Gracely Pain Scale □
		11-40	Mean change from baseline: 0.23 at
			Week 8□
			Null Type field
		Benztropine mesylate	Global Impression of Change,
		0.125 mg	Moderate, a lot, or complete relief□
		0.125 mg	% of patients: 48% at Week 8
		N=50	Pain intensity, Gracely Pain Scale □
		14-50	Mean change from baseline: 0.20 at
			Week 8
			Null Type field
Leijon	CT	Amitriptyline	Global Impression of Change,
1989	Crossover □	25 + 50 mg BID	Improved
Sweden	Single Center	Total daily dose: 75 mg	% of patients: 66.7% at 4 weeks
	Single Center		(p<0.05)
Efficacy quality: Fair		N=15	Pain intensity, 10-step verbal rating scale □
			Mean score: 4.2 at 4 weeks (p<0.05)□ 95% CI: 3.39, 5.01
		Carbamazepine	Global Impression of Change,
		400 mg BID	Improved□
		Total daily dose: 800 mg	% of patients: 35.7% at 4 weeks (p=NS)
		N=14	Pain intensity, 10-step verbal rating
			scale
			Mean score: 4.2 at 4 weeks (p=NS)□ 95% CI: 3.31, 5.09
		Placebo	Global Impression of Change,
			Improved□
		N=15	% of patients: 6.7% at 4 weeks
			Pain intensity, 10-step verbal rating
			scale□
			Mean score: 5.3 at 4 weeks□
			95% CI: 4.29, 6.31

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Study	Design	Intervention	Patient-reported pain
Max (A)	RCT□	Amitriptyline	Pain relief, Reporting greater pain relief
1987	Crossover□	mean 90 mg	with amitriptyline□
US	Single Center		% of patients: 79.3% at 12 weeks
		N=37	(p<0.0001)
Efficacy quality: Fair		Benztropine mesylate	Pain relief, Reporting greater pain relief
Lineacy quanty. I am			with placebo
		1 mg	·
			% of patients: 3.4% at 12 weeks
		N=37	
Max (C)	RCT□	Amitriptyline	Average pain intensity, Verbal
1988	Crossover□	12.5-150 mg (mean 65 mg)	descriptors converted to numerical
US	Single Center		scores□
	og.c coc.	N=58	Mean score: reported graphically only
Cfficació accelitos Caix		11-30	
Efficacy quality: Fair			at 6 weeks
			Pain relief, Moderate or greater relief□
			% of patients: reported graphically only
			at 6 weeks
		Lorazepam	Average pain intensity, Verbal
		0.5-6 mg (mean 2.4 mg)	descriptors converted to numerical
			scores□
		N=58	Mean score: reported graphically only
			at 6 weeks
			Pain relief, Moderate or greater relief□
			% of patients: reported graphically only
			at 6 weeks
		Disasha	Average pain intensity. Verbal
		Placebo	Average pain intensity, Verbal
			descriptors converted to numerical
		N=58	scores□
			Mean score: reported graphically only
			at 6 weeks
			Pain relief, Moderate or greater relief□
			_
			% of patients: reported graphically only
			at 6 weeks
Robinson	RCT	Amitriptyline	Average pain intensity (Phantom Limb
2004		Amurptymie	J .
	Parallel□		Pain), Numeric rating scale (0-10)
US	Single Center	N=20	Mean score: 3.1 at 6 weeks (p=NS)□
			95% CI: 1.92, 4.28
Efficacy quality: Fair			·
			Average pain intensity (Residual Limb
			Pain), Numeric rating scale (0-10)□
			Mean score: 3.1 at 6 weeks (p=NS)□
			95% CI: 2.14, 4.06
			Average ratio OF Ma O'll D
			Average pain, SF McGill Pain
			Questionnaire
			Mean score: 11.6 at 6 weeks (p=NS)□
			95% CI: 7.22, 15.98

Study	Design	Intervention	Patient-reported pain
			Interference with activities, BPI□
			Mean score: 30.3 at 6 weeks (p=NS)□
			95% CI: 16.89, 43.71
		Benztropine mesylate	Average pain intensity (Phantom Limb
			Pain), Numeric rating scale (0-10)□
		N=19	Mean score: 3.1 at 6 weeks□
			95% CI: 1.80, 4.40
			, in the second
			Average pain intensity (Residual Limb
			Pain), Numeric rating scale (0-10)□
			Mean score: 2.3 at 6 weeks□
			95% CI: 1.40, 3.20
			Average pain, SF McGill Pain
			Questionnaire
			Mean score: 12.5 at 6 weeks□
			95% CI: 8.63, 16.37
			Interference with activities, BPI□
			Mean score: 24.2 at 6 weeks
Olata	DOT	A section to the c	95% CI: 14.58, 33.82
Shlay	RCT	Amitriptyline	Average pain intensity, Gracely Scale
1998	Parallel□	75 mg	(0.0 to 7.75)□
US	Multicenter		Mean change from baseline: -0.23 at 6
		N=71	weeks (p=0.38)□
Efficacy quality: Fair			95% CI: -0.22 to 0.08
			Average pain intensity, Gracely Scale
			(0.0 to 7.75)□
			Mean change from baseline: -0.26 at
			14 weeks (p=0.99)□
			95% CI: -0.18 to 0.19
			Pain relief, Moderate or more pain
			relief□
			% of patients: 46.4% at 14 weeks
			(p=0.81)
			Pain relief, Moderate or more pain
			relief□
			% of patients: 50.8% at 6 weeks
			(p=0.68)
		Placebo	Average pain intensity, Gracely Scale
		1 10000	(0.0 to 7.75)□
		N=65	Mean change from baseline: -0.18 at 6
			weeks
			Average pain intensity, Gracely Scale
			(0.0 to 7.75)□
			Mean change from baseline: -0.30 at
			<u> </u>
			14 weeks
			Pain relief, Moderate or more pain
			relief□
			% of patients: 46.7% at 6 weeks

Study	Design	Intervention	Patient-reported pain
			Pain relief, Moderate or more pain
			relief□
			% of patients: 50.9% at 14 weeks
Vrethem	RCT□	Amitriptyline	Response, 20% reduction in verbal
1997	Crossover□	75 mg	scale (0-10)□
Sweden			% of patients: 63% at 4 weeks (p=NR)
		N=37	
Efficacy quality: Fair			Response, Improved, much improved,
			or pain free□
			% of patients: 67% at 4 weeks
			(p<0.001)
		Maprotiline	Response, 20% reduction in verbal
		75 mg	scale (0-10)□
		J S	% of patients: 50% at 4 weeks (p=NR)
		N=37	,
			Response, Improved, much improved,
			or pain free□
			% of patients: 42% at 4 weeks
			(p<0.05)
		Placebo	Response, 20% reduction in verbal
			scale (0-10)□
		N=37	% of patients: 22% at 4 weeks
			Response, Improved, much improved,
			or pain free□
			% of patients: NR at 4 weeks
Watson	RCT□	Amitriptyline	Response, Good or excellent
1982	Crossover	75 mg (median)	response -
Canada	NR	To mg (modian)	% of patients: 66.7% at 3 weeks
		N=24	(p<0.001)
Efficacy quality: Fair		Placebo	Response, Good or excellent
Emodoy quanty: 1 am		. 10000	response □
		N=24	% of patients: 4.2% at 3 weeks
Panerai	RCT□	Nortriptyline	Pain intensity, VAS (0-100 mm)□
1990	Crossover□	rtora ptymio	Mean score: reported graphically only,
Italy	010000101	N=39	superior to placebo at 3 weeks
.taly			(p<0.0001)
Efficacy quality: Poor		Chlorimipramine	Pain intensity, VAS (0-100 mm)□
Emodoy quanty: 1 ooi		omermiprarime	Mean score: reported graphically only,
		N=39	superior to placebo at 3 weeks
			(p<0.0001)
		Placebo	Pain intensity, VAS (0-100 mm)□
		1 100000	Mean score: reported graphically only
		N=39	at 3 weeks
Kishore-Kumar	RCT□	Desipramine	Average pain intensity, Verbal
1990	Crossover□	mean 167 mg	descriptor scale (Gracely pain scale)
	Single Center	modil for mg	Mean score: data not reported,
IUS	Chigic Certici		ivican score. data not reported,
US		N=26	superior to placeho at 6 weeks
Efficacy quality: Poor	_	N=26	superior to placebo at 6 weeks (p<0.001)

Study	Design	Intervention	Patient-reported pain
			Pain relief, Moderate or better relief□ % of patients: 63% at 6 weeks (p=NR)
		Benztropine mesylate 0.5-1 mg N=26	Average pain intensity, Verbal descriptor scale (Gracely pain scale) Mean score: data not reported at 6 weeks
Max (B) 1991 US Efficacy quality: Fair	RCT□ Crossover□	Desipramine N=24	Pain relief, Moderate or better relief□ % of patients: 11% at 6 weeks Pain intensity, Verbal descriptor scale (Gracely)□ Mean score: data reported graphically, superior to placebo at 6 weeks (p<0.01)
Efficacy quality. I all			Pain relief, Moderate or better relief□ % of patients: 55% at 6 weeks (p=NR)
		Benztropine mesylate	Pain intensity, Verbal descriptor scale (Gracely)□
		N=24	Mean score: dta reported graphically only at 6 weeks Pain relief, Moderate or better relief□ % of patients: 11% at 6 weeks
Sindrup (A)	RCT_	Paroxetine	Pain, VAS (100 mm)□
1990 Denmark	Crossover Multicenter	40 mg daily	Median score: 81.5 at 2 weeks (p=0.0121)
		N=29	
Efficacy quality: Poor		Imipramine 50 or 75 mg daily	Pain, VAS (100 mm)□ Median score: 37.0 at 2 weeks (p=0.0002)
		N=29 Placebo N=29	Pain, VAS (100 mm)□ Median score: 141.5 at 2 weeks
Sindrup (C) 1989 Denmark	RCT□ Crossover□	Imipramine 50 or 75 mg	Pain relief, Most relieved of symptoms % of patients: 88.9% at 3 weeks (p<0.01)
Efficacy quality: Poor			Pain, Lower score on a 6-item scale (0-2) \(\) of patients: 88.9% at 3 weeks (p<0.01)
		Placebo N=13	Pain relief, Most relieved of symptoms % of patients: 11% at 3 weeks Pain, Lower score on a 6-item scale (0-2) % of patients: 11% at 3 weeks (p=0.01)

Study	Design	Intervention	Patient-reported pain
Hammack	RCT□	Nortriptyline	Improvement, 13-item descriptor scale□
2002	Crossover□		Mean difference from placebo (%):
US	Multicenter	N=26	24% at 6 weeks (p=0.014)□
			95% CI: 6%-42%
Efficacy quality: Fair			
			Severity of pain, Verbal descriptor scale
			(5 points)□
			Mean change from baseline: -0.5 at 4
			weeks (p=0.99)
			Severity of pain, Visual analogue scale
			(0-100)□
			Mean change from baseline: -7.7 at 4
			weeks (p=0.78)
		Placebo	Severity of pain, Verbal descriptor scale
			(5 points)□
		N=25	Mean change from baseline: -0.4 at 4
			weeks
			Severity of pain, Visual analogue scale
			(0-100)□
			Mean change from baseline: -2.7 at 4
			weeks
Panerai	RCT□	Nortriptyline	Pain intensity, VAS (0-100 mm)□
1990	Crossover□		Mean score: reported graphically only,
Italy		N=39	superior to placebo at 3 weeks
			(p<0.0001)
Efficacy quality: Poor	•	Chlorimipramine	Pain intensity, VAS (0-100 mm)□
			Mean score: reported graphically only,
		N=39	superior to placebo at 3 weeks
			(p<0.0001)
		Placebo	Pain intensity, VAS (0-100 mm)□
			Mean score: reported graphically only
		N=39	at 3 weeks

Final Evidence Tables Drug Effectiveness Review Project Evidence Table 10. Functional outcomes in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs, and dextromethorphan for neuropathic pain

Study	Design	Intervention	Functional capacity
Eisenberg	RCT	Lamotrigine	Disability, Pain Disability Index□
2001	Parallel	200-400 mg	Mean score: 3.8 at 6 weeks (p=NS)□
Israel	Single Center		95% CI: 3.54, 4.06
		N=27	
Efficacy quality:		Placebo	Disability, Pain Disability Index□
Fair			Mean score: 4.3 at 6 weeks□
		N=26	Null Type field
Finnerup	RCT	Lamotrigine	Quality of life, SF-36 Mental Component summary □
2002	Crossover	200-400 mg	Median score: 60.7 at 9 weeks (p=0.80)□
Denmark	Single Center		
		N=30	Quality of life, SF-36 Physical component summary □
Efficacy quality:			Median score: 32.6 at 9 weeks (p=1.00)□
Fair			
		Placebo	Quality of life, SF-36 Mental Component summary □
			Median score: 61.9 at 9 weeks□
		N=30	
			Quality of life, SF-36 Physical component summary□
			Median score: 33.9 at 9 weeks□
McCleane	RCT	Lamotrigine	Mobility, VAS (0-10)□
1999	Parallel	200 mg	Mean change from baseline: -0.36 at 8 weeks (p=NS)
UK	Single Center		
		N=36	Quality of life, VAS (0-10)□
Efficacy quality:			Mean change from baseline: -0.38 at 8 weeks (p=NS)
Poor			
		Placebo	Mobility, VAS (0-10)□
			Mean change from baseline: -0.17 at 8 weeks
		N=38	Quality of life, VAS (0-10)□
			Mean change from baseline: -0.15 at 8 weeks
Vestergaard	RCT	Lamotrigine	Interference, 1-5□
2001	Crossover	200 mg	Median score: 3 at 8 weeks (p=0.11)□
Denmark	Multicenter		Range: 1-5
		N=30	
Efficacy quality:		Placebo	Interference, 1-5
Fair			Median score: 4 at 8 weeks□
		N=30	Range: 1-5
Beydoun	RCT	Oxcarbazepine	Quality of life, SF-36□
2006	Parallel	600 mg daily	: Data NR, no difference from placebo at 16 weeks
US		N. 00	(p=NS)
E.C		N=83	0 -17 -1111 - 05 00
Efficacy quality:		Oxcarbazepine	Quality of life, SF-36
Fair		1200 mg daily	: Data NR, no difference from placebo at 16 weeks
		N-07	(p=NS)
		N=87	Overlite of life OF OOD
		Oxcarbazepine	Quality of life, SF-36
		1800 mg daily	: Data NR, no difference from placebo at 16 weeks
		N-00	(p=NS)
		N=88	Quality of life SE 26
		Placebo	Quality of life, SF-36□ : Data NR. at 16 weeks
1		N-90	. Dala NR, at 10 weeks
Dogra	DCT	N=89	Quality of life SE 26 Montal Health
Dogra	RCT	Oxcarbazepine	Quality of life, SF-36 Mental Health
2005	Parallel	mean 1445 mg	Mean score: 47.2 at 16 weeks (p=0.03)
US	Multicenter	N-60	Quality of life, SF-36 other subscales
□#:000 /		N=69	Mean score: data not reported, no difference from
Efficacy quality:		Dieseles	placebo at 16 weeks (p=NS)
Fair		Placebo	Quality of life, SF-36 Mental Health
			Mean score: 50.2 at 16 weeks

Final Evidence Tables Drug Effectiveness Review Project Evidence Table 10. Functional outcomes in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs, and dextromethorphan for neuropathic pain

Study	Design	Intervention	Functional capacity
		N=77	Quality of life, SF-36 other subscales□
			Mean score: data not reported at 16 weeks
Khoromi	RCT	Topiramate	Disability, Oswestry Low Back Pain Disability
2005	Crossover	mean 208 mg	Questionnaire (%□
US			Mean score: 25 at 2 weeks (p=NS)□
		N=29	95% CI: 19.18, 30.82
Efficacy quality:			Quality of life, SF-36 Physical Functioning□
Fair			Mean score: 67 at 2 weeks (p=NS)
			Quality of life, SF-36 Bodily Pain□
			Mean score: 51 at 2 weeks (p=NS)
			Quality of life, SF-36 General Health Perception□
			Mean score: 72 at 2 weeks (p=NS)
			Quality of life, SF-36 Mental Health□
			Mean score: 74 at 2 weeks (p0.019(treatmentworse))
			Quality of life, SF-36 Vitality□
			Mean score: 54 at 2 weeks (p=NS)
		Diphenhydramine	Disability, Oswestry Low Back Pain Disability
		mean 40 mg	Questionnaire (%□
			Mean score: 27 at 2 weeks□
		N=29	95% CI: 21.54, 32.46
			Quality of life, SF-36 Physical Functioning□
			Mean score: 63 at 2 weeks
			Quality of life, SF-36 Bodily Pain□
			Mean score: 50 at 2 weeks
			Quality of life, SF-36 General Health Perception□
			Mean score: 72 at 2 weeks
			Quality of life, SF-36 Mental Health□
			Mean score: 80 at 2 weeks
			Quality of life, SF-36 Vitality□
			Mean score: 56 at 2 weeks
Raskin (A)	RCT	Topiramate	Quality of life, SF-36 Mental Component Summary□
2004	Parallel	mean 320 mg	Mean score: 46.9 at 12 weeks (p=0.023)□
US	Multicenter	N=208	95% CI: 45.28, 48.52
Efficacy quality:		11-200	Quality of life, SF-36 Physical Component Summary□
Fair			Mean score: 37.2 at 12 weeks (p=0.066)□
i dii			95% CI: 35.76, 38.64
		Discorto	0.45 465 05 00 Market 0.44 0.44 0.44
		Placebo	Quality of life, SF-36 Mental Component Summary
		N=109	Mean score: 49.9 at 12 weeks□ 95% CI: 48.00, 51.80
		N-109	93% CI. 46.00, 51.60
			Quality of life, SF-36 Physical Component Summary□
			Mean score: 34.9 at 12 weeks□
			95% CI: 33.14, 36.66
Cardenas	RCT	Amitriptyline	Disability, CHART□
2002	Parallel	10-125 mg daily	Mean score: 384.1 at 6 weeks (p=NS)□
US	Multicenter	10 120 mg dany	95% CI: 357.24, 410.96
		N=44	Disability, FIM□
Efficacy quality:		•	Mean score: 66.3 at 6 weeks (p=NS)□
Fair			95% CI: 61.37, 71.23
		Benztropine	Disability, CHART□
		mesylate	Mean score: 63.7 at 6 weeks□
		0.5 mg daily	95% CI: 58.03, 69.37
		- •	Disability, FIM□
		N=40	Mean score: 24.4 at 6 weeks□
			95% CI: 18.08, 30.72

Final Evidence Tables Drug Effectiveness Review Project Evidence Table 10. Functional outcomes in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs, and dextromethorphan for neuropathic pain

Study	Design	Intervention	Functional capacity
Kieburtz	RCT	Amitriptyline	Quality of life, General Health Self-Assessment form
1998	Parallel	25-100 mg	Data not reported: Data not reported at Week 8
US	Multicenter	25-100 mg	Data not reported. Data not reported at week o
03	Mulliceriter	N=47	
Cffice ou avality		Mexiletine	Quality of life, General Health Self-Assessment form
Efficacy quality:			
Fair		150 mg	Data not reported: Data not reported at Week 8
		N=48	
		Benztropine	Quality of life, General Health Self-Assessment form
		mesylate	Data not reported: Data not reported at Week 8
		0.125 mg	Data not reported. Data not reported at week o
		0.125 mg	
		N=50	
Robinson	RCT	Amitriptyline	Activities of Daily Living, FIM Instrument□
2004	Parallel	' '	Mean score: 74.5 at 6 weeks (p=NS)□
US	Single Center	N=20	95% CI: 66.26, 82.74
			Disability, CHART□
Efficacy quality:			Mean score: 360 at 6 weeks (p=NS)□
Fair			95% CI: 297.77, 422.23
			Quality of life, Satisfaction with Life Scale□
			Mean score: 21.2 at 6 weeks (p0.004(placebobetter))
			95% CI: 18.40, 24.00
			,
		Benztropine	Activities of Daily Living, FIM Instrument□
		mesylate	Mean score: 79.1 at 6 weeks□
			95% CI: 77.62, 80.58
		N=19	Disability, CHART□
			Mean score: 417 at 6 weeks□
			95% CI: 383.28, 450.72
			Quality of life, Satisfaction with Life Scale□
			Mean score: 21.8 at 6 weeks□
			95% CI: 17.89, 25.71
Shlay	RCT	Amitriptyline	Quality of life, Medical Outcome Study, Physical
1998	Parallel	75 mg	functioning□
US	Multicenter		Mean change from baseline: 5.9 at 6 weeks (p=0.94)□
		N=71	95% CI: -8.3 to 8.9
Efficacy quality:			
Fair			Quality of life, Medical Outcome Study, Physical
			functioning□
			Mean change from baseline: 7.1 at 14 weeks
			(p=0.17)□
			95% CI: -2.7 to 15.5
		Placebo	Quality of life, Medical Outcome Study, Physical
			functioning
		N=65	Mean change from baseline: 0.6 at 14 weeks
			Quality of life, Medical Outcome Study, Physical
			functioning□
	507	N. 4 . 4	Mean change from baseline: 5.1 at 6 weeks
Hammack	RCT	Nortriptyline	Interference, Verbal descriptor scale (5 points)□
2002	Crossover		Mean change from baseline: -0.3 at 4 weeks (p=0.04)
US	Multicenter	N=26	0 -15 - 155 - 15 - 15 - 15 - 15 - 15 - 1
E.C			Quality of life, Visual analogue scale (0-100)
Efficacy quality:			Mean change from baseline: -4.6 at 4 weeks (p=0.74)
Fair		Diacobo	Interference Verbal descriptor scale /5 maintain
		Placebo	Interference, Verbal descriptor scale (5 points)
		N-25	Mean change from baseline: 0.2 at 4 weeks
		N=25	Quality of life, Visual analogue scale (0-100)
			Mean change from baseline: -7.7 at 4 weeks

Evidence Table 11. Quality assessment of included randomized controlled trials

Author Year Country	Quality Rating	Randomization Adequate	Allocation Concealment Adequate	Groups Similar at Baseline	Eligibility Criteria Specified
Backonja 1999 US	Fair	Yes	Method not described	Yes	Yes
Beydoun 2006 US	Fair	Yes	Yes	Yes	Yes
Bone 2002 UK and Ireland	Fair	Yes	Yes	NR Only baseline pain levels reported as NSD between groups	Yes
Campbell 1966 England	Poor	Yes	Method not described	No □ 6% of carbazepine first group vs 29% of placebo first group had been injected for pain; otherwise similar	No
Cardenas 2002 US	Fair	Method not described	Yes	Yes	Yes
Carlsson 2004 Norway	Fair	No	Method not described	NR	Yes

Drugs for Neuropathic Pain Page 141 of 200

Evidence Table 11. Quality assessment of included randomized controlled trials

Author Year Country	Quality Rating	Randomization Adequate	Allocation Concealment Adequate	Groups Similar at Baseline	Eligibility Criteria Specified
Chandra 2006 India	Fair	Yes	Yes	Yes	Yes
Dalessio 1966 US	Poor	Method not described	Method not described	NR	No
Dallocchio 2000 Italy	Fair	Method not described	Method not described	Yes	Yes
Dogra 2005 US	Fair	Yes	Method not described	Yes	Yes
Drewes 1994 Denmark	Fair	Method not described	Method not described	NR□ Crossover	Yes
Dworkin 2003 US	Fair	Yes	Yes	Yes	Yes
Eisenberg 2001 Israel	Fair	Yes	Method not described	No□ duration of sx's longer in lamotrigine arm	Yes

Drugs for Neuropathic Pain Page 142 of 200

Author Year Country	Quality Rating	Randomization Adequate	Allocation Concealment Adequate	Groups Similar at Baseline	Eligibility Criteria Specified
Estanisla 2004 US	Fair	Method not described	Method not described	NR□ On baseline pain score; other characteristic NR	Yes
Finnerup 2002 Denmark	Fair	Yes	Yes	NR	Yes
Freynhagen 2005 Multiple European	Fair	Method not described	Method not described	Yes	Yes
Galer (A) 2002 US	Poor	Method not described	Method not described	Yes	Yes
Galer (B) 1999 US	Fair	Method not described	Method not described	NR	Yes

Drugs for Neuropathic Pain Page 143 of 200

Author Year Country	Quality Rating	Randomization Adequate	Allocation Concealment Adequate	Groups Similar at Baseline	Eligibility Criteria Specified
Gilron (A) 2005 Canada	Fair	Method not described	Yes	Yes	Yes
Gilron (B) 2001 US	Poor	Method not described	Method not described		Yes
Goldstein 2005 US	Fair	Yes	Yes	Yes□ More women in placebo group (48.7% vs 35%, p=0.033); otherwise similar	Yes
Gorson 1999	Fair	Method not described	Method not described	NR	Yes
Hahn 2004 Germany	Fair	Method not described	Yes	Yes	Yes
Hammack 2002 US	Fair	Balanced allocation	Not applicable	Yes	Yes

Drugs for Neuropathic Pain Page 144 of 200

Author Year Country	Quality Rating	Randomization Adequate	Allocation Concealment Adequate	Groups Similar at Baseline	Eligibility Criteria Specified
Kalso 1996 Finland	Fair	Method not described	Yes	NR	Yes
Khoromi 2005 US	Fair	Yes	Yes	NR	Yes
Kieburtz 1998 US	Fair	Yes		Yes	Yes
Killian 1968 US	Poor	Method not described	Method not described	NR	Yes
Kishore-Kumar 1990 US	Poor	Method not described	Method not described	NR	Yes
Kochar (A) 2002 India	Fair	Method not described	Method not described	Yes	Yes
Kochar (B) 2004 India	Fair	Method not described	Method not described	NR□ Baseline characteristics reported on 39/43 analyzed	Yes

Drugs for Neuropathic Pain Page 145 of 200

Author Year Country	Quality Rating	Randomization Adequate	Allocation Concealment Adequate	Groups Similar at Baseline	Eligibility Criteria Specified
Kochar (C) 2005□ India	Fair	Method not described	Method not described	Yes□ Baseline data reported for 40/45 completers only	Yes
Kvinesdal 1984 Denmark	Fair	Method not described	Method not described	NR□ Crossover	Yes
Leijon 1989 Sweden	Fair	Method not described	Method not described	NR	Yes
Lesser 2004 US	Fair	Method not described	Yes	Yes	Yes
Levendoglu 2004 Turkey	Fair	Method not described	Method not described	NR	Yes
Max (A) 1987 US	Fair	Method not described	Method not described	NR	Yes

Drugs for Neuropathic Pain Page 146 of 200

Author Year Country	Quality Rating	Randomization Adequate	Allocation Concealment Adequate	Groups Similar at Baseline	Eligibility Criteria Specified
Max (B) 1991 US	Fair	Method not described	Method not described	NR	Yes
Max (C) 1988 US	Fair	Method not described	Method not described	NR	Yes
Max (D) 1992 US	Fair	Method not described	Method not described	NR	Yes
McCleane 1999 UK	Poor	Yes	Method not described	NR Data only reported for 74/100 patients completing trial	Yes

Drugs for Neuropathic Pain Page 147 of 200

Author Year Country	Outcome Assessors Masked	Care Provider Masked	Patients Masked	Reporting of Attrition Crossover Adherence and Contamination	Carry Over Effects Handling (if crossover design)	Withdrawal Rate high (>85%)
Backonja 1999 US	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	Yes 16.7% gabapentin, 19.8% placebo
Beydoun 2006 US	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	Yes
Bone 2002 UK and Ireland	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	washout	Yes 5/19 (26.3%) withdrew
Campbell 1966 England	NR	NR	Yes	Attrition: Yes Crossover: Yes Adherence: No Contamination: No		No
Cardenas 2002 US	Yes	Yes	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	No 11/84 (13.1%)
Carlsson 2004 Norway	Unclear, reported as double blind	Unclear, reported as double blind	Unclear, reported as double blind	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	washout	No

Drugs for Neuropathic Pain Page 148 of 200

Author Year Country	Outcome Assessors Masked	Care Provider Masked	Patients Masked	Reporting of Attrition Crossover Adherence and Contamination	Carry Over Effects Handling (if crossover design)	Withdrawal Rate high (>85%)
Chandra 2006 India	Yes	Yes	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	No 7.9% overall (2/38 nortriptyline, 4/38 gabapentin)
Dalessio 1966 US	Unclear, reported as double blind	Unclear, reported as double blind	Unclear, reported as double blind	Attrition: Yes Crossover: No Adherence: No Contamination: No	none	Yes 20%
Dallocchio 2000 Italy	No	No	No	Attrition: Yes□ Crossover: No□ Adherence: No□ Contamination: No□	NA	No
Dogra 2005 US	Unclear, reported as double blind	Unclear, reported as double blind	Unclear, reported as double blind	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	Yes 40/146
Drewes 1994 Denmark	Yes	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	washout	No
Dworkin 2003 US	Yes	Yes	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	Yes 34.8% pregabalin, 11.9% placebo
Eisenberg 2001 Israel	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	Yes 13/59 (22%)

Drugs for Neuropathic Pain Page 149 of 200

Author Year Country	Outcome Assessors Masked	Care Provider Masked	Patients Masked	Reporting of Attrition Crossover Adherence and Contamination	Carry Over Effects Handling (if crossover design)	Withdrawal Rate high (>85%)
Estanisla 2004 US	Unclear, reported as double blind	Unclear, reported as double blind	Unclear, reported as double blind	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	washout	No
Finnerup 2002 Denmark	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	washout	Yes
Freynhagen 2005 Multiple European	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	Yes 129/338 (38.2%)
Galer (A) 2002 US	Unclear, reported as double blind	Unclear, reported as double blind	Unclear, reported as double blind	Attrition: No Crossover: No Adherence: No Contamination: No	NA	Unable to determine
Galer (B) 1999 US	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	NR	No

Drugs for Neuropathic Pain Page 150 of 200

Author Year Country	Outcome Assessors Masked	Care Provider Masked	Patients Masked	Reporting of Attrition Crossover Adherence and Contamination	Carry Over Effects Handling (if crossover design)	Withdrawal Rate high (>85%)
Gilron (A) 2005 Canada	Unclear, reported as double blind	Yes	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	analysis	Yes Attrition 16/57
Gilron (B) 2001 US	Unclear, reported as double blind	Yes	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	washout	No
Goldstein 2005 US	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	NA	Yes
Gorson 1999	Unclear, reported as double blind	Unclear, reported as double blind	Unclear, reported as double blind	Attrition: No Crossover: No Adherence: No Contamination: No	washout	No
Hahn 2004 Germany	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	Yes 19%
Hammack 2002 US	Unclear, reported as double blind	Yes	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	washout	No

Drugs for Neuropathic Pain Page 151 of 200

Author Year Country	Outcome Assessors Masked	Care Provider Masked	Patients Masked	Reporting of Attrition Crossover Adherence and Contamination	Carry Over Effects Handling (if crossover design)	Withdrawal Rate high (>85%)
Kalso 1996 Finland	Unclear, reported as double blind	Yes	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No		Yes 5/20 (25%)
Khoromi 2005 US	Unclear, reported as double blind	Unclear, reported as double blind	Unclear, reported as double blind	Attrition: Yes Crossover: No Adherence: No Contamination: No	washout	Yes
Kieburtz 1998 US	Yes	Yes	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	Yes 35/145 (24%)
Killian 1968 US	Unclear, reported as double blind	Yes	Yes	Attrition: No Crossover: No Adherence: No Contamination: No	NA	Unable to determine
Kishore-Kumar 1990 US	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	none	Yes 7/26
Kochar (A) 2002 India	Unclear, reported as double blind	Unclear, reported as double blind	Unclear, reported as double blind	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	No
Kochar (B) 2004 India	Yes	Unclear, reported as double blind	Unclear, reported as double blind	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	NA	No

Drugs for Neuropathic Pain Page 152 of 200

Author Year Country	Outcome Assessors Masked	Masked	Patients Masked	Reporting of Attrition Crossover Adherence and Contamination	Carry Over Effects Handling (if crossover design)	high (>85%)
Kochar (C) 2005□ India	Unclear, reported as double blind	as double blind	Unclear, reported as double blind	Crossover: No Adherence: Yes Contamination: No	NA	No
Kvinesdal 1984 Denmark	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	none	Yes
Leijon 1989 Sweden	Yes	Yes	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	washout	No
Lesser 2004 US	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	NA	No
Levendoglu 2004 Turkey	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	washout	No
Max (A) 1987 US	Yes	Yes	Yes	Attrition: Yes Crossover: No Adherence: Yes Contamination: No	none	Yes

Drugs for Neuropathic Pain Page 153 of 200

Final Evidence Tables

Drug Effectiveness Review Project

Evidence Table 11. Quality assessment of included randomized controlled trials

Author Year Country	Outcome Assessors Masked	Care Provider Masked	Patients Masked	Reporting of Attrition Crossover Adherence and Contamination	Carry Over Effects Handling (if crossover design)	Withdrawal Rate high (>85%)
Max (B) 1991 US	Unclear, reported as double blind	Yes	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	none	Yes 16.7% withdrew
Max (C) 1988 US	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	washout	Yes 21/62 (34%)
Max (D) 1992 US	Unclear, reported as double blind	Yes	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	washout	Yes 8/28 entered into fluoxetine vs. placebo withdrew
McCleane 1999 UK	Unclear, reported as double blind	Unclear, reported as double blind	Yes	Attrition: Yes Crossover: No Adherence: No Contamination: No	NA	Yes

Drugs for Neuropathic Pain Page 154 of 200

Author Year Country	Loss to Followup Differential or High	Intention to Treat Analysis (at least 95% analyzed)	Post randomization or Post enrollment Exclusions	Number Screened Eligible Enrolled	Exclusion Criteria Specified	Funding
Backonja 1999 US	No	Yes <5% not analyzed	Yes□ lack of compliance (n=6 total)	Screened: 232 Eligible: 221 Enrolled: 165	Yes	Parke-Davis
Beydoun 2006 US	No	Yes Used LOCF, but number analyzed not clear	No	Screened: NR Eligible: NR Enrolled: 347	Yes	Novartis
Bone 2002 UK and Ireland	No	Yes	No	Screened: 33 Eligible: 27 Enrolled: 19	Yes	Pfizer provided study medication
Campbell 1966 England	No	No 70/76 analyzed	Yes□ 7/77 post- randomization exclusions	Screened: NR Eligible: NR Enrolled: 77	No	Not reported (Geigy Pharmaceuticals supplied carbazepine)
Cardenas 2002 US	No	Yes	No	Screened: 282 Eligible: 157 Enrolled: 84	Yes	Government funded (NIH and Dept of Education)
Carlsson 2004 Norway	No	No 13/15 (86%) analyzed	No	Screened: 22 Eligible: 21 Enrolled: 15	Yes	Not reported

Drugs for Neuropathic Pain Page 155 of 200

Author Year Country	Loss to Followup Differential or High	Intention to Treat Analysis (at least 95% analyzed)	Post randomization or Post enrollment Exclusions	Number Screened Eligible Enrolled	Exclusion Criteria Specified	Funding
Chandra 2006 India	No	No 70/76 analyzed (92.1%)	No	Screened: 110 Eligible: 79 Enrolled: 76	Yes	Pfizer (partly)
Dalessio 1966 US	No	Yes	No	Screened: NR Eligible: NR Enrolled: 10	No	Geigy provided study drug, otherwise NR
Dallocchio 2000 Italy	No	Yes	No	Screened: NR Eligible: NR Enrolled: 25	Yes	Not reported
Dogra 2005 US	No	Yes	No	Screened: 289 Eligible: 156 Enrolled: 146	Yes	Novartis
Drewes 1994 Denmark	No	Yes	Yes□ 1/20	Screened: NR Eligible: NR Enrolled: 20	Yes	Rhone-Poulenc Rorer A/S
Dworkin 2003 US	No	Yes LOCF	excluded for lack of efficay (n=6)	Screened: 245 Eligible: 188 Enrolled: 173	Yes	Pfizer
Eisenberg 2001 Israel	No	No	No	Screened: 160 Eligible: NR Enrolled: 59	Yes	Glaxo-Wellcome

Drugs for Neuropathic Pain Page 156 of 200

Author Year Country	Loss to Followup Differential or High	Intention to Treat Analysis (at least 95% analyzed)	Post randomization or Post enrollment Exclusions	Number Screened Eligible Enrolled	Exclusion Criteria Specified	Funding
Estanisla 2004 US	No	Unable to determine says analysis was ITT, but no details.	Yes□ compliance (1)	Screened: NR Eligible: 64 Enrolled: 64	Yes	Hind Health Care and NIH
Finnerup 2002 Denmark	No	No 22/30 analyzed	No	Screened: 436 Eligible: 100 Enrolled: 30	Yes	Foundation and government; Glaxo provided medication
Freynhagen 2005 Multiple European	No	Yes 2/338 not analyzed (<1%)	Yes□ 7.3% for lack of compliance of other reason	Screened: 503 Eligible: NR Enrolled: 338	Yes	Pfizer
Galer (A) 2002 US	Unable to determine	No Only analyzed those with final data; Number randomized NR (only number analyzed)	Unable to determine	Screened: 150 Eligible: NR Enrolled: NR	No	Endo Pharmaceuticals
Galer (B) 1999 US	No	Yes	No□ <5% (1 patient who had a stroke)	Screened: NR Eligible: NR Enrolled: 33	Yes	Hind Health Care, Inc.

Drugs for Neuropathic Pain Page 157 of 200

Author Year Country	Loss to Followup Differential or High	Intention to Treat Analysis (at least 95% analyzed)	Post randomization or Post enrollment Exclusions	Number Screened Eligible Enrolled	Exclusion Criteria Specified	Funding
Gilron (A) 2005 Canada	Unable to determine	Unable to determine Not clear- states no patients excluded for missing data, but number analyzed not explicit, and 16 withdrawals	Unable to determine□ Reasons for withdrawal NR (13/57)	Screened: 86 Eligible: 70 Enrolled: 57	Yes	Government (Canadian Institutes of Health Research). Study medication provided by Pfizer and Aventis- Pharma
Gilron (B) 2001 US	No	Yes	No	Screened: NR Eligible: NR Enrolled: 3	Yes	Government (NIH) and Ortho-McNeil
Goldstein 2005 US	No	No 347/457 analyzed for primary outcome	Yes□ 17 subjects in total due to sponsor decision or protocol violation	Screened: 763 Eligible: 457 Enrolled: 457	Yes	Eli Lilly and PRN Consulting
Gorson 1999	No	Yes	No	Screened: NR Eligible: NR Enrolled: 40	Yes	Warner-Lambert (Parke-Davis Pharmaceuticals)
Hahn 2004 Germany	No	No 24/26 analyzed (92.3%)	No	Screened: NR Eligible: NR Enrolled: 26	Yes	Pfizer
Hammack 2002 US	No	Yes Imputation for missing data	Yes□ 6/57	Screened: NR Eligible: NR Enrolled: 57	Yes	

Drugs for Neuropathic Pain Page 158 of 200

Author Year Country	Loss to Followup Differential or High	Intention to Treat Analysis (at least 95% analyzed)	Post randomization or Post enrollment Exclusions	Number Screened Eligible Enrolled	Exclusion Criteria Specified	Funding
Kalso 1996 Finland	No	No	Yes□ 1/20 excluded due to noncompliance	Screened: NR Eligible: NR Enrolled: 20	Yes	Academy of Finland, Paulo Foundation, Centre for International Mobility
Khoromi 2005 US	No	No	Yes□ 1/42	Screened: NR Eligible: 42 Enrolled: 42	Yes	Government (NIH) and Ortho McNeil
Kieburtz 1998 US	No	No	No	Screened: NR Eligible: NR Enrolled: 145	Yes	Government (NIH); medication provided by Boerhinger-Ingelheim.
Killian 1968 US	Unable to determine	No 36/42 analyzed	Unable to determine	Screened: NR Eligible: NR Enrolled: 42		
Kishore-Kumar 1990 US	No	No 19/26 (73%)	No	Screened: NR Eligible: NR Enrolled: 26	Yes	Not reported
Kochar (A) 2002 India	No	No	Yes	Screened: 60 Eligible: NR Enrolled: 57	Yes	Not reported
Kochar (B) 2004 India	No	No	No	Screened: 48 Eligible: 44 Enrolled: 43	Yes	Not reported

Drugs for Neuropathic Pain Page 159 of 200

Author Year Country	Loss to Followup Differential or High	Intention to Treat Analysis (at least 95% analyzed)	Post randomization or Post enrollment Exclusions	Number Screened Eligible Enrolled	Exclusion Criteria Specified	Funding
Kochar (C) 2005□ India	No	No	No	Screened: 48 Eligible: 45 Enrolled: 45	Yes	Not reported
Kvinesdal 1984 Denmark	No	No	No	Screened: NR Eligible: NR Enrolled: 15	Yes	Not reported (tablets provided by Dumex Ltd)
Leijon 1989 Sweden	No	No	No	Screened: 27 Eligible: 15 Enrolled: 15	Yes	Government and foundation (County Council of Ostergotland and Swedish Association of the Neurologically Disabled)
Lesser 2004 US	No	Yes	No	Screened: 578 Eligible: NR Enrolled: 338	Yes	Pfizer
Levendoglu 2004 Turkey	No	Yes	No	Screened: NR Eligible: NR Enrolled: 20	Yes	No funds received
Max (A) 1987 US	No	No	Unable to determine	Screened: NR Eligible: NR Enrolled: 37	Yes	Not reported

Drugs for Neuropathic Pain Page 160 of 200

Final Evidence Tables

Drug Effectiveness Review Project

Evidence Table 11. Quality assessment of included randomized controlled trials

Author Year Country	Loss to Followup Differential or High	Intention to Treat Analysis (at least 95% analyzed)	Post randomization or Post enrollment Exclusions	Number Screened Eligible Enrolled	Exclusion Criteria Specified	Funding
Max (B) 1991 US	No	No 20/24 analyzed (83.3%)	No	Screened: NR Eligible: NR Enrolled: 24	Yes	Not reported
Max (C) 1988 US	No	No 41/62 who completed both arms (partial sensitivity analysis on 11/21)	Unable to determine	Screened: NR Eligible: NR Enrolled: NR	Yes	
Max (D) 1992 US	No	No	Unable to determine	Screened: NR Eligible: NR Enrolled: 54	Yes	Not reported
McCleane 1999 UK	No	No 74/100 analyzed	Unable to determine	Screened: NR Eligible: NR Enrolled: 100	Yes	Not reported

Drugs for Neuropathic Pain Page 161 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs	Specific adverse events
Backonja	RCT	Painful diabetic neuropathy	Gabapentin	Total: 14 (16.67%)	Confusion: 8.3% (7/84)
1999	Parallel	Fairiui diabetic nediopatriy	3600 mg	AE: 7 (8.33%)	Diarrhea: 10.7% (9/84)
	Multicenter	N=165	3000 mg	AE. 7 (6.33%)	
US	wullicenter	N=105			Dizziness: 23.8% (20/84)
					Headache: 10.7% (9/84)
					Nausea: 8.3% (7/84)
			D	T / 1 40 /40 TE0/	Somnolence: 22.6% (19/84)
			Placebo	Total: 16 (19.75%	Confusion: 1.2% (1/81)
				AE: 5 (6.17%)	Diarrhea: 8.6% (7/81)
					Dizziness: 4.9% (4/81)
					Headache: 3.7% (3/81)
					Nausea: 4.9% (4/81)
					Somnolence: 6.2% (5/81)
Bone	RCT	Phantom limb pain	Gabapentin	Total: 2 (20%)	Dizziness: 20.0% (2/10)
2002	Crossover		2400 mg		Headache: 20.0% (2/10)
UK and Ireland	Single Center	N=19			Nausea: 10.0% (1/10)
					Somnolence: 70.0% (7/10)
			Placebo	Total: 3 (33.33%)	Dizziness: 11.1% (1/9)
					Headache: 11.1% (1/9)
					Nausea: 11.1% (1/9)
					Somnolence: 22.2% (2/9)
Hahn	RCT	HIV-related neuropathic pain	Gabapentin	Total: 2 (13.33%	Dizziness: 60.0% (9/15)
2004	Parallel		1200-2400 mg	AE: 1 (6.67%)	Gait abnormal: 46.7% (7/15)
Germany	Multicenter	N=26		,	Headache: 6.7% (1/15)
,					Nausea: 33.3% (5/15)
					Somnolence: 80.0% (12/15)
			Placebo	Total: 3 (27.27%)	Dizziness: 45.5% (5/11)
				AE: 0 (0%)	Gait abnormal: 27.3% (3/11)
				(5,73)	Headache: 9.1% (1/11)
					Nausea: 18.2% (2/11)
					Somnolence: 18.2% (2/11)
Levendoglu	RCT	Spinal cord injury-related	Gabapentin	Total: 0	Blurred vision: 0.0% (0/20)
2004	Crossover	pain	3600 mg	AE: 0	Diarrhea: 0.0% (0/20)
Turkey	010000000	pair	oooo mg	AL. O	Edema: 15.0% (3/20)
Turkey		N=20			Headache: 5.0% (1/20)
		14-20			Itching: 10.0% (2/20)
					Muscle twitching: 0.0% (0/20)
					• • •
					Nausea: 0.0% (0/20)
					Somnolence: 15.0% (3/20)
					Vertigo: 15.0% (3/20)
					Vomiting: 0.0% (0/20)
			D	7.1.0	Weakness: 25.0% (5/20)
			Placebo	Total: 0	Blurred vision: 0.0% (0/20)
				AE: 0	Diarrhea: 0.0% (0/20)
					Edema: 0.0% (0/20)
					Headache: 5.0% (1/20)
					Itching: 0.0% (0/20)

Drugs for Neuropathic Pain Page 162 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/	Intervention	Withdrawals/	Specific adverse events
		Sample size		Withdrawals due to AEs	Mussala tuitakia su 0 00/ (0/00)
					Muscle twitching: 0.0% (0/20) Nausea: 5.0% (1/20)
					Somnolence: 0.0% (0/20)
					Vertigo: 5.0% (1/20)
					Vomiting: 5.0% (1/20)
					Weakness: 10.0% (2/20)
Rice	RCT	Post-herpetic neuralgia	Gabapentin	Total: 22 (19.13%)	Any adverse event: 70.4% (81/115)
2001	Parallel		1800 mg	AE: 15 (13.04%)	Asthenia: 6.1% (7/115)
UK	Multicenter	N=334			Diarrhea: 6.1% (7/115)
					Dizziness: 31.3% (36/115)
					Dry mouth: 6.1% (7/115)
					Edema, peripheral: 5.2% (6/115)
					Serious AEs: 2.6% (3/115)
					Somnolence: 17.4% (20/115)
			Gabapentin□	Total: 23 (21.3%)□	Any adverse event: 75.0% (81/108)
			2400 mg	AE: 19 (17.59%)	Asthenia: 5.6% (6/108)
					Diarrhea: 4.6% (5/108)
					Dizziness: 33.3% (36/108)
					Dry mouth: 4.6% (5/108)
					Edema, peripheral: 11.1% (12/108)
					Serious AEs: 0.9% (1/108)
					Somnolence: 20.4% (22/108)
			Placebo□	Placebo□	Any adverse event: 49.5% (55/111)
					Asthenia: 3.6% (4/111)
			N=111□	N=111□	Diarrhea: 0.9% (1/111)
					Dizziness: 9.9% (11/111)
			Age, mean (SD): 75 (28.9-	Age, mean (SD): 75 (28.9-	Dry mouth: 0.9% (1/111)
			94.8 (range))□	94.8 (range))□	Edema, peripheral: 0.0% (0/111)
			Gender□	Gender□	Serious AEs: 0.9% (1/111)
			Male: 46 (41%)□	Male: 46 (41%)□	Somnolence: 6.3% (7/111)
Rowbotham (D)	RCT	Post-herpetic neuralgia	Gabapentin	Total: 24 (21.24%)	Any adverse event: 54.9% (62/113)
1998	Parallel	. cot norpodo nodraigia	3600 mg	AE: 21 (18.58%)	Ataxia: 7.1% (8/113)
US	Multicenter	N=225	ooo mg	712.21 (10.0070)	Dizziness: 23.9% (27/113)
00	Waltiocritor	14 220			Edema, peripheral: 9.7% (11/113)
					Infection: 8.0% (9/113)
					Somnolence: 27.4% (31/113)
			Placebo	Total: 21 (18.1%)	Any adverse event: 27.6% (32/116)
			lacebo	AE: 14 (12.07%)	Ataxia: 0.0% (0/116)
				AE. 14 (12.07 %)	Dizziness: 5.2% (6/116)
					Edema, peripheral: 3.4% (4/116)
					Infection: 2.6% (3/116)
0 !!	DOT	NA:	Oakaaatta	T.1.1.00 (04.05%)	Somnolence: 5.2% (6/116)
Serpell	RCT	Mixed	Gabapentin	Total: 32 (21.05%)	Abdominal pain: 6.5% (10/153)
2002	Parallel			AE: 24 (15.79%)	Accidental injury: 5.9% (9/153)
UK and Republic	Multicenter	N=305			Any adverse event: 76.5% (117/153)
of Ireland					Diarrhea: 5.2% (8/153)

Drugs for Neuropathic Pain Page 163 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs	Specific adverse events
		Sample Size		Withdrawais due to AES	Dizziness: 24.2% (37/153)
					Flu syndrome: 7.2% (11/153)
					Headache: 9.2% (14/153)
					Infection: 9.2% (14/153)
					Nausea: 9.2% (14/153)
					Serious AEs: 2.6% (4/153)
			Disastes	T-t-1: 44 (00 00())	Somnolence: 14.4% (22/153)
			Placebo	Total: 41 (26.8%)	Abdominal pain: % (6/152)
				AE: 25 (16.34%)	Accidental injury: % (8/152)
					Any adverse event: % (103/152)
					Diarrhea: % (6/152)
					Dizziness: % (12/152)
					Flu syndrome: % (7/152)
					Headache: % (21/152)
					Infection: % (19/152)
					Nausea: % (14/152)
					Serious AEs: % (4/152)
					Somnolence: % (8/152)
Simpson (A) Part	RCT	Painful diabetic neuropathy	Gabapentin	Total: 3 (10%)	Confusion: 7.4% (2/27)
1	Parallel		900-2700 mg	AE: 2 (6.67%)	Diarrhea: 11.1% (3/27)
2001	Single Center	N=60			Dizziness: 22.2% (6/27)
US					Headache: 11.1% (3/27)
					Nausea: 7.4% (2/27)
					Somnolence: 22.2% (6/27)
			Placebo	Total: 3 (10%)	Confusion: 0.0% (0/27)
				AE: 2 (6.67%)	Diarrhea: 3.7% (1/27)
				, ,	Dizziness: 3.7% (1/27)
					Headache: 3.7% (1/27)
					Nausea: 3.7% (1/27)
					Somnolence: 3.7% (1/27)
Yildirim	RCT	Radiculopathy	Gabapentin	Total: 2 (8%)	Dizziness: 4.0% (1/25)
2003	Parallel	, and another part of	900 mg-3600 mg	(0,75)	Somnolence: 4.0% (1/25)
Turkey		N=50	Placebo	Total: 5 (20%)	Dizziness: 0.0% (0/25)
rancy		14 00	i lucebo	10tal: 0 (2070)	Somnolence: 0.0% (0/25)
Simpson (A) Part	RCT.	Painful diabetic neuropathy	Gabapentin	Total: 3 (10%)	Confusion: 7.4% (2/27)
1	Parallel	airital diabetic ficulopatity	900-2700 mg	AE: 2 (6.67%)	Diarrhea: 11.1% (3/27)
2001	Single Center	N=60	300-27 00 mg	AL. 2 (0.01 /0)	Dizziness: 22.2% (6/27)
US	Single Center	11-00			Headache: 11.1% (3/27)
03					Nausea: 7.4% (2/27)
					,
			Placebo	Total: 2 (10%)	Somnolence: 22.2% (6/27)
			riacebo	Total: 3 (10%)	Confusion: 0.0% (0/27)
				AE: 2 (6.67%)	Diarrhea: 3.7% (1/27)
					Dizziness: 3.7% (1/27)
					Headache: 3.7% (1/27)
					Nausea: 3.7% (1/27)
					Somnolence: 3.7% (1/27)

Drugs for Neuropathic Pain Page 164 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/	Intervention	Withdrawals/	Specific adverse events
		Sample size		Withdrawals due to AEs	
Dworkin	RCT	Post-herpetic neuralgia	Pregabalin	Total: 31 (34.83%	Amblyopia: 11.2% (10/89)
2003	Parallel		300-600 mg	AE: 28 (31.46%)	Ataxia: 6.7% (6/89)
US	Multicenter	N=173			Confusion: 6.7% (6/89)
					Diarrhea: 6.7% (6/89)
					Dizziness: 28.1% (25/89)
					Dry mouth: 11.2% (10/89)
					Edema, peripheral: 19.1% (17/89)
					Gait abnormal: 7.9% (7/89)
					Headache: 7.9% (7/89)
					Somnolence: 24.7% (22/89)
					Speech disorder: 5.6% (5/89)
			Placebo	Total: 10 (11.9%)□	Amblyopia: 1.2% (1/84)
				AE: 4 (4.76%)	Ataxia: 0.0% (0/84)
				1 (2.13)	Confusion: 0.0% (0/84)
					Diarrhea: 4.8% (4/84)
					Dizziness: 11.9% (10/84)
					Dry mouth: 2.4% (2/84)
					Edema, peripheral: 2.4% (2/84)
					Gait abnormal: 1.2% (1/84)
					Headache: 8.3% (7/84)
					Somnolence: 7.1% (6/84)
					Speech disorder: 0.0% (0/84)
Freynhagen	RCT	Mixed	Pregabalin	Total: 49 (34.75%)	Asthenia: 6.4% (9/141)
2005	Parallel	IVIIXEG	150-600 mg	AE: 24 (17.02%)	
		N-220	150-600 mg	AE. 24 (17.02%)	Dizziness: 2.1% (3/141)
Multiple European	i wuiticenter	N=338			Dry mouth: 2.8% (4/141)
					Edema, peripheral: 2.1% (3/141)
					Headache: 5.0% (7/141)
					Nausea: 5.0% (7/141)
					Somnolence: 10.6% (15/141)
					Vertigo: 7.8% (11/141)
					Weight gain: 0.7% (1/141)
			Pregabalin	Total: 50 (37.88%)	Asthenia: 9.1% (12/132)
			600 mg	AE: 33 (25%)	Dizziness: 28.8% (38/132)
					Dry mouth: 6.1% (8/132)
					Edema, peripheral: 7.6% (10/132)
					Headache: 2.3% (3/132)
					Nausea: 10.6% (14/132)
					Somnolence: 12.9% (17/132)
					Vertigo: 9.8% (13/132)
					Weight gain: 13.6% (18/132)
			Placebo	Total: 30 (46.15%)	Asthenia: 0.0% (0/65)
				AE: 5 (7.69%)	Dizziness: 4.6% (3/65)
				,	Dry mouth: 4.6% (3/65)
					Edema, peripheral: 3.1% (2/65)
					Headache: 3.1% (2/65)
					Nausea: 1.5% (1/65)
					Mausca. 1.370 (1703)

Drugs for Neuropathic Pain Page 165 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/	Intervention	Withdrawals/	Specific adverse events
		Sample size		Withdrawals due to AEs	Somnolence: 0.0% (0/65)
					Vertigo: 1.5% (1/65)
Londor	RCT	Dainful diabatic nouronathy	Drogobolin	Total: 10 (12 00%)	Weight gain: 3.1% (2/65)
Lesser		Painful diabetic neuropathy	Pregabalin	Total: 10 (12.99%)	Accidental injury: 5.2% (4/77)
2004	Parallel	N-227	75 mg	AE: 2 (2.6%)	Amblyopia: 2.6% (2/77)
US	Multicenter	N=337			Amnesia: 2.6% (2/77)
					Asthenia: 3.9% (3/77)
					Ataxia: 6.5% (5/77)
					Confusion: 0.0% (0/77)
					Constipation: 0.0% (0/77)
					Diarrhea: 5.2% (4/77)
					Dizziness: 7.8% (6/77)
					Dry mouth: 2.6% (2/77)
					Edema, peripheral: 3.9% (3/77)
					Euphoria: 0.0% (0/77)
					Headache: 6.5% (5/77)
					Infection: 3.9% (3/77)
					Somnolence: 3.9% (3/77)
			Pregabalin□	Total: 5 (6.17%)□	Accidental injury: 2.5% (2/81)
			300 mg	AE: 3 (3.7%)	Amblyopia: 4.9% (4/81)
					Amnesia: 0.0% (0/81)
					Asthenia: 4.9% (4/81)
					Ataxia: 3.7% (3/81)
					Confusion: 4.9% (4/81)
					Constipation: 3.7% (3/81)
					Diarrhea: 1.2% (1/81)
					Dizziness: 27.2% (22/81)
					Dry mouth: 7.4% (6/81)
					Edema, peripheral: 7.4% (6/81)
					Euphoria: 6.2% (5/81)
					Headache: 8.6% (7/81)
					Infection: 9.9% (8/81)
					Somnolence: 23.5% (19/81)
			Pregabalin□	Total: 12 (14.63%)□	Accidental injury: 4.9% (4/82)
			600 mg	AE: 10 (12.2%)	Amblyopia: 8.5% (7/82)
					Amnesia: 6.1% (5/82)
					Asthenia: 7.3% (6/82)
					Ataxia: 8.5% (7/82)
					Confusion: 8.5% (7/82)
					Constipation: 8.5% (7/82)
					Diarrhea: 3.7% (3/82)
					Dizziness: 39.0% (32/82)
					Dry mouth: 4.9% (4/82)
					Edema, peripheral: 13.4% (11/82)
					Euphoria: 4.9% (4/82)
					Headache: 9.8% (8/82)

Drugs for Neuropathic Pain Page 166 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/	Intervention	Withdrawals/	Specific adverse events
		Sample size		Withdrawals due to AEs	
					Infection: 1.2% (1/82)
					Somnolence: 26.8% (22/82)
			Placebo	Total: 8 (8.25%)□	Accidental injury: 0.0% (0/97)
				AE: 3 (3.09%)	Amblyopia: 1.0% (1/97)
					Amnesia: 1.0% (1/97)
					Asthenia: 3.1% (3/97)
					Ataxia: 2.1% (2/97)
					Confusion: 2.1% (2/97)
					Constipation: 1.0% (1/97)
					Diarrhea: 7.2% (7/97)
					Dizziness: 5.2% (5/97)
					Dry mouth: 0.0% (0/97)
					Edema, peripheral: 2.1% (2/97)
					Euphoria: 0.0% (0/97)
					Headache: 10.3% (10/97)
					Infection: 7.2% (7/97)
					Somnolence: 4.1% (4/97)
Richter	RCT	Painful diabetic neuropathy	Pregabalin	Total: 4 (5.06%)	Accidental injury: 2.5% (2/79)
2005	Parallel		150 mg	AE: 2 (2.53%)	Amblyopia: 2.5% (2/79)
US	Multicenter	N=246			Asthenia: 3.8% (3/79)
					Constipation: 3.8% (3/79)
					Diarrhea: 5.1% (4/79)
					Dizziness: 10.1% (8/79)
					Dry mouth: 0.0% (0/79)
					Edema, peripheral: 3.8% (3/79)
					Headache: 7.6% (6/79)
					Infection: 12.7% (10/79)
					Somnolence: 5.1% (4/79)
					Weight gain: 1.3% (1/79)
			Pregabalin	Total: 10 (12.2%)	Accidental injury: 9.8% (8/82)
			600 mg	AE: 7 (8.54%)	Amblyopia: 8.5% (7/82)
					Asthenia: 12.2% (10/82)
					Constipation: 6.1% (5/82)
					Diarrhea: 2.4% (2/82)
					Dizziness: 37.8% (31/82)
					Dry mouth: 8.5% (7/82)
					Edema, peripheral: 17.1% (14/82)
					Headache: 15.9% (13/82)
					Infection: 6.1% (5/82)
					Somnolence: 22.0% (18/82)
					Weight gain: 9.8% (8/82)
			Placebo	Total: 13 (15.29%)	Accidental injury: 5.9% (5/85)
				AE: 4 (4.71%)	Amblyopia: 5.9% (5/85)
					Asthenia: 3.5% (3/85)
					Constipation: 4.7% (4/85)
					Diarrhea: 3.5% (3/85)

Drugs for Neuropathic Pain Page 167 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs	Specific adverse events
		Gample Size		Withdrawais due to AES	Dizziness: 2.4% (2/85)
					Dry mouth: 2.4% (2/85)
					Edema, peripheral: 4.7% (4/85)
					Headache: 10.6% (9/85)
					Infection: 9.4% (8/85)
					Somnolence: 3.5% (3/85)
					Weight gain: 0.0% (0/85)
Rosenstock	RCT	Painful diabetic neuropathy	Pregabalin	Total: 11 (14.47%)	Accidental injury: 3.9% (3/76)
2004	Parallel	airiui diabetic flediopatriy	300 mg	AE: 8 (10.53%)	Abblyopia: 5.3% (4/76)
JS	Multicenter	N=146	300 mg	AL. 0 (10.3370)	Asthenia: 3.9% (3/76)
J3	Mullicenter	140			Constipation: 5.3% (4/76)
					Diarrhea: 3.9% (3/76)
					Diarriea. 3.9% (3/76) Dizziness: 35.5% (27/76)
					\ /
					Edema, peripheral: 10.5% (8/76)
					Euphoria: 5.3% (4/76)
					Flatulence: 3.9% (3/76)
					Flu syndrome: 3.9% (3/76)
					Headache: 6.6% (5/76)
					Hyperglycemia: 3.9% (3/76)
					Infection: 14.5% (11/76)
					Nausea: 7.9% (6/76)
					Somnolence: 19.7% (15/76)
					Vomiting: 3.9% (3/76)
			Placebo	Total: 8 (11.43%)	Accidental injury: 5.7% (4/70)
				AE: 2 (2.86%)	Amblyopia: 1.4% (1/70)
					Asthenia: 2.9% (2/70)
					Constipation: 0.0% (0/70)
					Diarrhea: 2.9% (2/70)
					Dizziness: 11.4% (8/70)
					Edema, peripheral: 1.4% (1/70)
					Euphoria: 0.0% (0/70)
					Flatulence: 1.4% (1/70)
					Flu syndrome: 4.3% (3/70)
					Headache: 10.0% (7/70)
					Hyperglycemia: 0.0% (0/70)
					Infection: 5.7% (4/70)
					Nausea: 8.6% (6/70)
					Somnolence: 2.9% (2/70)
					Vomiting: 1.4% (1/70)
Sabatowski	RCT	Post-herpetic neuralgia	Pregabalin	Total: 10 (12.35%)	Asthenia: 6.2% (5/81)
2004	Parallel	. cot norpotto notataigia	150 mg	AE: 9 (11.11%)	Diarrhea: 4.9% (4/81)
2004 Multiple Europear		N=238	100 mg	AL. 3 (11.1170)	Dizziness: 12.3% (10/81)
and Australia	iviuiticeritei	14-230			Dry mouth: 11.1% (9/81)
and Australia					Edema, peripheral: 2.5% (2/81)
					Headache: 11.1% (9/81)
					\ /
					Infection: 2.5% (2/81)

Drugs for Neuropathic Pain Page 168 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/	Intervention	Withdrawals/	Specific adverse events
		Sample size		Withdrawals due to AEs	Compolones: 14 99/ (12/91)
			Dragabalia	Total: 16 (21 05%)	Somnolence: 14.8% (12/81)
			Pregabalin	Total: 16 (21.05%)	Asthenia: 2.6% (2/76)
			300 mg	AE: 12 (15.79%)	Diarrhea: 5.3% (4/76)
					Dizziness: 27.6% (21/76)
					Dry mouth: 6.6% (5/76)
					Edema, peripheral: 13.2% (10/76)
					Headache: 10.5% (8/76)
					Infection: 6.6% (5/76)
			Discortos	Talah 00 (04 000()	Somnolence: 23.7% (18/76)
			Placebo	Total: 20 (24.69%)	Asthenia: 4.9% (4/81)
				AE: 8 (9.88%)	Diarrhea: 4.9% (4/81)
					Dizziness: 14.8% (12/81)
					Dry mouth: 3.7% (3/81)
					Edema, peripheral: 0.0% (0/81)
					Headache: 3.7% (3/81)
					Infection: 0.0% (0/81)
					Somnolence: 7.4% (6/81)
Siddall	RCT	Spinal cord injury-related	Carbazepine	Total: 21 (30%)	Amblyopia: 8.6% (6/70)
2006	Parallel□	pain		AE: 15 (21.43%)	Amnesia: 10.0% (7/70)
	Multicenter				Asthenia: 15.7% (11/70)
		N=137			Constipation: 12.9% (9/70)
					Dizziness: 24.3% (17/70)
					Dry mouth: 15.7% (11/70)
					Edema: 20.0% (14/70)
					Infection: 8.6% (6/70)
					Myasthenia: 8.6% (6/70)
					Paresthesia: 5.7% (4/70)
					Serious AEs: 18.6% (13/70)
					Somnolence: 41.4% (29/70)
					Thinking abnormal: 8.6% (6/70)
					Urinary incontinence: 5.7% (4/70)
			Placebo	Total: 30 (44.78%)	Amblyopia: 3.0% (2/67)
				AE: 9 (13.43%)	Amnesia: 3.0% (2/67)
					Asthenia: 6.0% (4/67)
					Constipation: 6.0% (4/67)
					Dizziness: 9.0% (6/67)
					Dry mouth: 3.0% (2/67)
					Edema: 6.0% (4/67)
					Infection: 6.0% (4/67)
					Myasthenia: 4.5% (3/67)
					Paresthesia: 1.5% (1/67)
					Serious AEs: 11.9% (8/67)
					Somnolence: 9.0% (6/67)
					Thinking abnormal: 1.5% (1/67)
					Urinary incontinence: 3.0% (2/67)
van Seventer	RCT	Post-herpetic neuralgia	Pregabalin	Total: 26 (29.89%)	Amblyopia: 2.3% (2/87)

Drugs for Neuropathic Pain Page 169 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/	Intervention	Withdrawals/	Specific adverse events
		Sample size		Withdrawals due to AEs	
2006	Parallel		150 mg	AE: 7 (8.05%)	Asthenia: 4.6% (4/87)
US and Multiple	Multicenter	N=368			Ataxia: 3.4% (3/87)
European					Confusion: 3.4% (3/87)
					Constipation: 1.1% (1/87)
					Diarrhea: 5.7% (5/87)
					Diplopia: 0.0% (0/87)
					Dizziness: 16.1% (14/87)
					Dry mouth: 5.7% (5/87)
					Edema, face: 3.4% (3/87)
					Edema, peripheral: 12.6% (11/87)
					Edema, peripheral: 3.4% (3/87)
					Flatulence: 1.1% (1/87)
					Gait abnormal: 1.1% (1/87)
					Headache: 4.6% (4/87)
					Incoordination: 2.3% (2/87)
					Nausea: 1.1% (1/87)
					Somnolence: 9.2% (8/87)
					Sweating increased: 1.1% (1/87)
					Thinking abnormal: 2.3% (2/87)
					Vision abnormal: 0.0% (0/87)
					Weight gain: 3.4% (3/87)
			Pregabalin	Total: 36 (36.73%)	Amblyopia: 3.1% (3/98)
			300 mg	AE: 15 (15.31%)	Asthenia: 3.1% (3/98)
			555g	7121 10 (1010 170)	Ataxia: 6.1% (6/98)
					Confusion: 3.1% (3/98)
					Constipation: 8.2% (8/98)
					Diarrhea: 0.0% (0/98)
					Diplopia: 0.0% (0/98)
					Dizziness: 32.7% (32/98)
					Dry mouth: 4.1% (4/98)
					Edema, face: 1.0% (1/98)
					Edema, peripheral: 14.3% (14/98)
					Edema, peripheral: 3.1% (3/98)
					Flatulence: 0.0% (0/98)
					Gait abnormal: 2.0% (2/98)
					Headache: 1.0% (1/98)
					Incoordination: 1.0% (1/98)
					Nausea: 0.0% (0/98)
					Somnolence: 11.2% (11/98)
					Sweating increased: 0.0% (0/98)
					Thinking abnormal: 2.0% (2/98)
					Vision abnormal: 2.0% (2/98)
					\ /
			Drogobalia =	Total: 24 (27 700/)	Weight gain: 8.2% (8/98)
			Pregabalin □	Total: 34 (37.78%)□	Amblyopia: 5.6% (5/90)
1			300-600 mg	AE: 19 (21.11%)	Asthenia: 5.6% (5/90)
					Ataxia: 12.2% (11/90)

Drugs for Neuropathic Pain Page 170 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/	Intervention	Withdrawals/	Specific adverse events
		Sample size		Withdrawals due to AEs	
					Confusion: 3.3% (3/90)
					Constipation: 8.9% (8/90)
					Diarrhea: 0.0% (0/90)
					Diplopia: 3.3% (3/90)
					Dizziness: 36.7% (33/90)
					Dry mouth: 12.2% (11/90)
					Edema, face: 4.4% (4/90)
					Edema, peripheral: 13.3% (12/90)
					Edema, peripheral: 5.6% (5/90)
					Flatulence: 3.3% (3/90)
					Gait abnormal: 4.4% (4/90)
					Headache: 4.4% (4/90)
					Incoordination: 3.3% (3/90)
					Nausea: 2.2% (2/90)
					Somnolence: 25.6% (23/90)
					Sweating increased: 0.0% (0/90)
					Thinking abnormal: 4.4% (4/90)
					Vision abnormal: 4.4% (4/90)
					Weight gain: 8.9% (8/90)
			Placebo	Total: 34 (36.56%)□	Amblyopia: 1.1% (1/93)
				AE: 5 (5.38%)	Asthenia: 5.4% (5/93)
					Ataxia: 0.0% (0/93)
					Confusion: 1.1% (1/93)
					Constipation: 2.2% (2/93)
					Diarrhea: 1.1% (1/93)
					Diplopia: 0.0% (0/93)
					Dizziness: 9.7% (9/93)
					Dry mouth: 0.0% (0/93)
					Edema, face: 2.2% (2/93)
					Edema, peripheral: 10.8% (10/93)
					Edema, peripheral: 3.2% (3/93)
					Flatulence: 2.2% (2/93)
					Gait abnormal: 0.0% (0/93)
					Headache: 3.2% (3/93)
					Incoordination: 0.0% (0/93)
					Nausea: 5.4% (5/93)
					Somnolence: 4.3% (4/93)
					Sweating increased: 3.2% (3/93)
					Thinking abnormal: 1.1% (1/93)
					Vision abnormal: 0.0% (0/93)
					Weight gain: 0.0% (0/93)
Goldstein	RCT	Painful diabetic neuropathy	Duloxetine	Total: 24 (20.87%)	Anorexia: 2.6% (3/115)
2005	Parallel		20 mg daily	AE: 5 (4.35%)	Appetite decreased: 2.6% (3/115)
US	Multicenter	N=457		(Constipation: 5.2% (6/115)
		1.0.			Dizziness: 6.1% (7/115)
					Dry mouth: 5.2% (6/115)

Drugs for Neuropathic Pain Page 171 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs	Specific adverse events
		Campio cizo		William aware due to Alex	Nausea: 13.9% (16/115)
					Somnolence: 7.8% (9/115)
					Sweating increased: 6.1% (7/115)
					Weakness: 0.9% (1/115)
			Duloxetine	Total: 28 (24.56%)	Anorexia: 2.6% (3/114)
			60 mg daily	AE: 15 (13.16%)	Appetite decreased: 2.6% (3/114)
			oo mg dany	712. 10 (10.1070)	Constipation: 14.9% (17/114)
					Dizziness: 9.6% (11/114)
					Dry mouth: 7.0% (8/114)
					Nausea: 16.7% (19/114)
					Somnolence: 20.2% (23/114)
					Sweating increased: 3.5% (4/114)
					Weakness: 2.6% (3/114)
			Duloxetine	Total: 33 (29.2%)	Anorexia: 8.0% (9/113)
			60 mg BID	AE: 22 (19.47%)	Appetite decreased: 12.4% (14/113)
			Total daily dose: 120 mg	AE. 22 (19.47 /6)	Constipation: 10.6% (12/113)
			Total daily dose. 120 mg		Dizziness: 23.0% (26/113)
					Dry mouth: 15.0% (17/113)
					Nausea: 27.4% (31/113)
					Somnolence: 28.3% (32/113)
					Sweating increased: 8.8% (10/113)
			B	T (1 00 (0 1 050())	Weakness: 7.1% (8/113)
			Placebo	Total: 28 (24.35%)	Anorexia: 0.9% (1/115)
				AE: 7 (6.09%)	Appetite decreased: 0.0% (0/115)
					Constipation: 3.5% (4/115)
					Dizziness: 7.0% (8/115)
					Dry mouth: 6.1% (7/115)
					Nausea: 9.6% (11/115)
					Somnolence: 7.8% (9/115)
					Sweating increased: 2.6% (3/115)
					Weakness: 0.0% (0/115)
Raskin (B) 2005	RCT□	Painful diabetic neuropathy	Duloxetine	Total: 15 (12.93%)	Any adverse event: 61.2% (71/116)
and 2006	Parallel□		60 mg once daily	AE: 5 (4.31%)	Serious AEs: 3.4% (4/116)
2005	Multicenter	N=348	Duloxetine	Total: 21 (18.1%)	Any adverse event: 62.9% (73/116)
US			60 mg twice daily	AE: 14 (12.07%)	Serious AEs: 1.7% (2/116)
			Placebo	Total: 16 (13.79%)	Any adverse event: 49.1% (57/116)
				AE: 3 (2.59%)	Serious AEs: 3.4% (4/116)
Wernicke	RCT	Painful diabetic neuropathy	Duloxetine	Duloxetine	Constipation: 7.0% (8/114)
2006	Parallel		60 mg once daily	60 mg once daily	Diarrhea: 11.4% (13/114)
US	Multicenter	N=334	Total daily dose: 60 mg	Total daily dose: 60 mg	Dizziness: 15.8% (18/114)
					Fatigue: 12.3% (14/114)
			N=114	N=114	Headache: 10.5% (12/114)
					Insomnia: 5.3% (6/114)
					Nasopharyngitis: 7.0% (8/114)
					Nausea: 28.1% (32/114)
					Somnolence: 7.9% (9/114)

Drugs for Neuropathic Pain Page 172 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs	Specific adverse events
		Sample Size		Withdrawais due to AES	Sweating increased: 8.8% (10/114)
			Duloxetine	Total: 34 (30.36%)	Constipation: 18.8% (21/112)
			60 mg twice daily	AE: 20 (17.86%)	Diarrhea: 4.5% (5/112)
			Total daily dose: 120 mg	AE. 20 (17.80%)	Dizziness: 10.7% (12/112)
			Total daily dose. 120 mg		Fatique: 12.5% (14/112)
					Headache: 13.4% (15/112)
					Insomnia: 9.8% (11/112)
					Nasopharyngitis: 6.3% (7/112) Nausea: 32.1% (36/112)
					Somnolence: 15.2% (17/112)
			Di I	T 1 1 00 (01 00()	Sweating increased: 7.1% (8/112)
			Placebo	Total: 23 (21.3%)	Constipation: 1.9% (2/108)
				AE: 8 (7.41%)	Diarrhea: 1.9% (2/108)
					Dizziness: 5.6% (6/108)
					Fatigue: 2.8% (3/108)
					Headache: 6.5% (7/108)
					Insomnia: 1.9% (2/108)
					Nasopharyngitis: 4.6% (5/108)
					Nausea: 6.5% (7/108)
					Somnolence: 0.9% (1/108)
					Sweating increased: 0.9% (1/108)
Rowbotham (C)	RCT	Painful diabetic neuropathy	Venlafaxine	Total: 12 (14.81%)	Anorexia: 8.6% (7/81)
2004	Parallel		75 mg daily	AE: 6 (7.41%)	Dyspepsia: 11.1% (9/81)
US	Multicenter	N=244			Flatulence: 1.2% (1/81)
					Impotence (men only): 10.9% (6/55)
					Insomnia: 6.2% (5/81)
					Myalgia: 6.2% (5/81)
					Nausea: 27.2% (22/81)
					Sinusitis: 3.7% (3/81)
					Somnolence: 17.3% (14/81)
					Sweating increased: 6.2% (5/81)
					Vomiting: 7.4% (6/81)
			Venlafaxine	Total: 18 (21.95%)	Anorexia: 6.1% (5/82)
			150-225 mg daily	AE: 8 (9.76%)	Dyspepsia: 12.2% (10/82)
					Flatulence: 7.3% (6/82)
					Impotence (men only): 11.9% (5/42)
					Insomnia: 12.2% (10/82)
					Myalgia: 7.3% (6/82)
					Nausea: 12.2% (10/82)
					Sinusitis: 8.5% (7/82)
					Somnolence: 18.3% (15/82)
					Sweating increased: 12.2% (10/82)
					Vomiting: 6.1% (5/82)
			Placebo	Total: 12 (14.81%)	Anorexia: 3.7% (3/81)
				AE: 3 (3.7%)	Dyspepsia: 1.2% (1/81)
				1 = 2 (3 /3)	Flatulence: 3.7% (3/81)

Drugs for Neuropathic Pain Page 173 of 200

Evidence Table 12. Adverse events in placebo controlled trials of pregabalin, gabapentin, SNRIs, and topical lidocaine for neuropathic pain

Study	Design	Type of pain/	Intervention	Withdrawals/	Specific adverse events
		Sample size		Withdrawals due to AEs	
					Impotence (men only): 0.0% (0/48)
					Insomnia: 4.9% (4/81)
					Myalgia: 0.0% (0/81)
					Nausea: 6.2% (5/81)
					Sinusitis: 3.7% (3/81)
					Somnolence: 1.2% (1/81)
					Sweating increased: 4.9% (4/81)
					Vomiting: 0.0% (0/81)
asmuth	RCT	Cancer-related neuropathic	Venlafaxine		Anorexia: 23.1% (3/13)
2002	Crossover	pain	37.5 mg		Constipation: 30.8% (4/13)
inland	Single Center				Difficult to urinate: 15.4% (2/13)
		N=13			Dry mouth: 61.5% (8/13)
					Fatigue: 69.2% (9/13)
					Headache: 46.2% (6/13)
					Nausea: 30.8% (4/13)
					Nightmares: 15.4% (2/13)
					Palpitations: 23.1% (3/13)
					Sweating increased: 61.5% (8/13)
			Placebo		Anorexia: 30.8% (4/13)
					Constipation: 23.1% (3/13)
					Difficult to urinate: 15.4% (2/13)
					Dry mouth: 46.2% (6/13)
					Fatigue: 76.9% (10/13)
					Headache: 30.8% (4/13)
					Nausea: 30.8% (4/13)
					Nightmares: 30.8% (4/13)
					Palpitations: 23.1% (3/13)
					Sweating increased: 53.8% (7/13)
'ucel	RCT	Mixed	Venlafaxine	Total: 1 (5%	Any adverse event: 45.0% (9/20)
2005	Paralle		75 mg	AE: 1 (5.26%)	` '
urkey	Single Center	N=55	Venlafaxine	Total: 3 (15%)	Any adverse event: 70.0% (14/20)
,			150 mg	AE: 3 (17.65%)	
			Placebo	Total: 1 (5%)	Any adverse event: 55.0% (11/20)
				AE: 1 (5.26%)	, , , , , , , , , , , , , , , , , , , ,
Estanislao	RCT	HIV-related neuropathic pain	Lidocaine gel	Total: 5 (15.62%)	Dermatologic reaction: 6.3% (2/32)
2004	Crossover		5%	AE: 2 (6.25%)	, ,
JS	Multicenter	N=64	Placebo	Total: 3 (9.38%)	Dermatologic reaction: 0.0% (0/32)
				AE: 0 (0%)	

Drugs for Neuropathic Pain Page 174 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
Leijon 1989 Sweden	CT Crossover Single Center	Central/post-stroke neuropathic pain N=15	Amitriptyline □ 25 + 50 mg BID Carbamazepine 400 mg BID Total daily dose: 800 mg	Total: 0 (0%)□ AE: 0 (0%) Total: 0 (0%)□ AE: 0 (0%)
Eisenberg	RCT	Painful diabetic	Placebo Lamotrigine	Total: 0 (0%)□ AE: 0 (0%) Not reported
2001 Israel	Paralle Single Center	neuropathy N=53	200-400 mg	Not reported
			Placebo	Not reported
Finnerup 2002 Denmark	RCT Crossover Single Center	Spinal cord injury- related pain N=22	Lamotrigine 200-400 mg	Total: 3 (10%)□ AE: 1 (3.33%)
			Placebo	Total: 5 (16.67%)□ AE: 2 (6.67%)
Simpson (B) 2003 US	RCT Parallel Multicenter	HIV-related neuropathic pain N=227	Lamotrigine 400 mg	Total: 17 (27.42%)□ AE: 5 (8.06%)
			Lamotrigine 600 mg	Total: 17 (19.32%)□ AE: 5 (5.68%)
			Placebo	Total: 7 (23.33%)□

Drugs for Neuropathic Pain Page 175 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
				AE: 2 (6.67%)
			Placebo	Total: 14 (29.79%)□ AE: 5 (10.64%)
Vestergaard 2001 Denmark	RCT Crossover Multicenter	Central/post-stroke neuropathic pain N=30	Lamotrigine 200 mg	Total: 4 (13.33%)□ AE: 0 (0%)
		N=30	Placebo	Total: 6 (20%)□ AE: 0 (0%)
Zakrzewska 1997 UK	RCT Crossover	Trigeminal neuralgia N=14	Lamotrigine 400 mg	Total: 0 (0%)□ AE: 0 (0%)
			Placebo	Total: 1 (7.14%)□ AE: 0 (0%)

Drugs for Neuropathic Pain Page 176 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
Beydoun 2006 US	RCT Parallel	Painful diabetic neuropathy N=347	Oxcarbazepine 600 mg daily	Total: 16 (19.28%)□ AE: 9 (10.84%)
			Oxcarbazepine 1200 mg daily	Total: 34 (39.08%)□ AE: 20 (22.99%)
			Oxcarbazepine 1800 mg daily	Total: 48 (54.55%)□ AE: 36 (40.91%)
			Placebo	Total: 17 (19.1%)□ AE: 6 (6.74%)
Dogra 2005 US	RCT Parallel Multicenter	Painful diabetic neuropathy N=146	Oxcarbazepine mean 1445 mg	Total: 25 (36.23%)□ AE: 19 (27.54%)
			Placebo	Total: 15 (19.48%)□

Drugs for Neuropathic Pain Page 177 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
				AE: 6 (7.79%)
Khoromi 2005 US	RCT Crossover	Neuropathy associated with low back pain N=29	Topiramate mean 208 mg	Total: 10 (34.48%)□ AE: 10 (34.48%)
			Diphenhydramine mean 40 mg	Total: 1 (3.45%)□ AE: 1 (3.45%)

Drugs for Neuropathic Pain Page 178 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
Raskin (A) 2004 US	RCT Parallel Multicenter	Painful diabetic neuropathy□ □ N=317	Topiramate mean 320 mg	Total: 102 (49.04%)□ AE: 52 (25%)
			Placebo	Total: 29 (26.61%)□ AE: 9 (8.26%)
Thienel 2004 Multiple	RCT Parallel Multicenter	Painful diabetic neuropathy□ □ N=1269	Topiramate 100 mg	Total: 116 (45.85%)□ AE: 41 (16.21%)
			Topiramate 200 mg	Total: 197 (52.96%)□ AE: 93 (25%)

Drugs for Neuropathic Pain Page 179 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
			Topiramate 400 mg	Total: 151 (58.08%)□ AE: 79 (30.38%)
			Placebo	Total: 156 (40.62%)□ AE: 32 (8.33%)
Drewes 1994 Denmark	RCT Crossover Single Center	Spinal cord injury- related pain □ N=20	Sodium valproate median 1800 mg (600- 2400 mg) Placebo	Total: 0 (0%)□ AE: 0 (0%) Total: 0 (0%)□
Max (D) 1992 US	RCT Crossover NR	Painful diabetic neuropathy□ □ N=54	Fluoxetine 20-40 mg	AE: 0 (0%) Not reported
			Benztropine mesylate	Not reported

Drugs for Neuropathic Pain Page 180 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
			0.125 to 1.5 mg	
Cardenas 2002 US	RCT Parallel Multicenter	Spinal cord injury- related pain □	Amitriptyline 10-125 mg daily Benztropine mesylate	Not reported
Kalso 1996 Finland	RCT Crossover Single Center	N=84 Cancer-related neuropathic pain N=15	0.5 mg daily Amitriptyline 50 mg	Not reported
			Amitriptyline 100 mg	Not reported
			Placebo	Not reported

Drugs for Neuropathic Pain Page 181 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
Kieburtz 1998 US	RCT Parallel Multicenter	HIV-related neuropathic pain N=145	Amitriptyline 25-100 mg	Total: 13 (27.66%)□ AE: 3 (6.38%)
			Mexiletine 150 mg	Total: 14 (29.17%)□ AE: 4 (8.33%)
			Benztropine mesylate 0.125 mg	Total: 12 (24%)□ AE: 4 (8%)
Leijon 1989 Sweden	CT Crossover Single Center	Central/post-stroke neuropathic pain□ □ N=15	Amitriptyline 25 + 50 mg BID Total daily dose: 75 mg Carbamazepine 400 mg BID	Total: 0 (0%)□ AE: 0 (0%) Total: 0 (0%)□ AE: 0 (0%)
			Total daily dose: 800 mg Placebo	Total: 0 (0%)□ AE: 0 (0%)
Max (A) 1987 US	RCT Crossover Single Center	Painful diabetic neuropathy□ □ N=29	Amitriptyline mean 90 mg	Not reported

Drugs for Neuropathic Pain Page 182 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
			Benztropine mesylate 1 mg	Not reported
Max (C) 1988 US	RCT Crossover Single Center	Post-herpetic neuralgia □ □ N=58	Amitriptyline 12.5-150 mg (mean 65 mg)	Not reported
			Lorazepam 0.5-6 mg (mean 2.4 mg)	Not reported
			Placebo	Not reported
Robinson 2004 US	RCT Parallel Single Center	Phantom limb pain□ □ N=39	Amitriptyline	Total: 2 (10%)□ AE: 2 (10%)

Drugs for Neuropathic Pain Page 183 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
			Benztropine mesylate	Total: 0 (0%)□ AE: 0 (0%)
Vrethem 1997	RCT Crossover	Polyneuropathy□	Amitriptyline 75 mg	AE: 3 (8.11%)
Sweden		N=36	Maprotiline	AE: 2 (5.41%)
			75 mg	7.2.2 (0.1176)

Drugs for Neuropathic Pain Page 184 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
			Placebo	AE: 0 (0%)
Panerai 1990 Italy	RCT Crossover	Mixed□ □ N=39	Nortriptyline Chlorimipramine	Total: 7 (17.95%)□ AE: 2 (5.13%) Total: 1 (2.56%)□
Kishore-Kumar	RCT	Post-herpetic	Placebo Desipramine	AE: 0 (0%) Total: 7 (17.95%)□ AE: 1 (2.56%) Total: 5 (19.23%)□
1990 US	Crossover Single Center	neuralgia □ □ N=26	mean 167 mg	AE: 5 (19.23%)
			Benztropine mesylate 0.5-1 mg	Total: 3 (11.54%)□ AE: 3 (11.54%)

Drugs for Neuropathic Pain Page 185 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
Max (B) 1991 US	RCT Crossover	Painful diabetic neuropathy□ □ N=24	Desipramine	Total: 2 (8.33%)□ AE: 2 (8.33%)
			Benztropine mesylate	Total: 2 (8.33%)□ AE: 1 (4.17%)
Kvinesdal 1984 Denmark	RCT Crossover Single Center	Painful diabetic neuropathy□	Imipramine 100 mg Placebo	Total: 3 (20%)□ AE: 1 (6.67%) Total: 0 (0%)□
Sindrup (C) 1989 Denmark	RCT Crossover	N=12 Painful diabetic neuropathy□ □ N=9	Imipramine□ 50 or 75 mg Placebo	AE: 0 (0%) Total: 1 (7.69%) AE: 1 (7.69%) Total: 2 (15.38%) AE: 2 (15.38%)
Hammack 2002 US	RCT Crossover Multicenter	Cisplatinum-induced neuropathic pain	Nortriptyline	Total: 2 (7.69%)□ AE: 2 (7.69%)
			Placebo	Total: 4 (16%)□ AE: 4 (16%)
Panerai 1990	RCT Crossover	Mixed	Nortriptyline	Total: 7 (17.95%)□ AE: 2 (5.13%)

Drugs for Neuropathic Pain Page 186 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Design	Type of pain/ Sample size	Intervention	Withdrawals/ Withdrawals due to AEs
Italy		N=39	Chlorimipramine	Total: 1 (2.56%)□ AE: 0 (0%)
			Placebo	Total: 7 (17.95%)□ AE: 1 (2.56%)

Drugs for Neuropathic Pain Page 187 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events	
Leijon	Any adverse event: 93.3% (14/15)	
1989 Sweden	Any adverse event: 92.9% (13/14)	
	Any adverse event: 46.7% (7/15)	
Eisenberg	Dizziness: 12.5% (3/24)	
2001	Headache: 8.3% (2/24)	
Israel	Nausea: 16.7% (4/24)	
	Rash: 8.3% (2/24)	
	Somnolence: 4.2% (1/24)	
	Stomach problems: 12.5% (3/24)	
	Dizziness: 18.2% (4/22)	
	Headache: 9.1% (2/22)	
	Nausea: 18.2% (4/22)	
	Rash: 0.0% (0/22)	
	Somnolence: 18.2% (4/22)	
	Stomach problems: 4.5% (1/22)	
Finnerup	Any adverse event: 48.1% (13/27)	
2002	CNS AEs: 44.4% (12/27)	
Denmark	Gastrointestinal AEs: 14.8% (4/27)	
	Skin AEs: 14.8% (4/27)	
	Any adverse event: 50.0% (14/28)	
	CNS AEs: 32.1% (9/28)	
	Gastrointestinal AEs: 10.7% (3/28)	
	Skin AEs: 14.3% (4/28)	
Simpson (B)	Diarrhea: 10.7% (16/150)	
2003	Headache: 10.7% (16/150)	
US	Infection: 11.3% (17/150)	
	Nausea: 11.3% (17/150)	
	Rash: 14.0% (21/150)	
	Diarrhea: % (/)	
	Headache: % (/)	
	Infection: % (/)	
	Nausea: % (/)	
	Rash: % (/)	
	Diarrhea: 9.1% (7/77)	

Drugs for Neuropathic Pain Page 188 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events			
	Headache: 10.4% (8/77)			
	Infection: 9.1% (7/77)			
	Nausea: 10.4% (8/77)			
	Rash: 11.7% (9/77)			
	Diarrhea: % (/)			
	Headache: % (/)			
	Infection: % (/)			
	Nausea: % (/)			
	Rash: % (/)			
Vestergaard	CNS AEs: 26.7% (8/30)			
2001	Gastrointestinal AEs: 23.3% (7/30)			
Denmark	Respiratory AEs: 13.3% (4/30)			
	Skin AEs: 16.7% (5/30)			
	CNS AEs: 43.3% (13/30)			
	Gastrointestinal AEs: 6.7% (2/30)			
	Respiratory AEs: 16.7% (5/30)			
	Skin AEs: 10.0% (3/30)			
Zakrzewska	Amblyopia: 7.7% (1/13)			
1997	Any adverse event: 53.8% (7/13)			
UK	Asthenia: 7.7% (1/13)			
	Ataxia: 7.7% (1/13)			
	Constipation: 23.1% (3/13)			
	Difficult to urinate: 7.7% (1/13)			
	Diplopia: 15.4% (2/13)			
	Dizziness: 38.5% (5/13)			
	Nausea: 23.1% (3/13)			
	Somnolence: 23.1% (3/13)			
	Sweating increased: 7.7% (1/13)			
	Tremor: 7.7% (1/13)			
	Vomiting: 15.4% (2/13)			
	Amblyopia: 0.0% (0/14)			
	Any adverse event: 50.0% (7/14)			
	Asthenia: 7.1% (1/14)			
	Ataxia: 0.0% (0/14)			
	Constipation: 14.3% (2/14)			
	Difficult to urinate: 7.1% (1/14)			
	Diplopia: 0.0% (0/14)			
	Dizziness: 7.1% (1/14)			
	Nausea: 7.1% (1/14)			

Drugs for Neuropathic Pain Page 189 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events
	Somnolence: 7.1% (1/14)
	Sweating increased: 7.1% (1/14)
	Tremor: 7.1% (1/14)
	Vomiting: 0.0% (0/14)
Beydoun	Dizziness: 6.0% (5/83)
2006	Fatigue: 4.8% (4/83)
US	Headache: 10.8% (9/83)
	Nausea: 2.4% (2/83)
	Somnolence: 2.4% (2/83)
	Tremor: 1.2% (1/83)
	Dizziness: 18.8% (16/85)
	Fatigue: 12.9% (11/85)
	Headache: 10.6% (9/85)
	Nausea: 15.3% (13/85)
	Somnolence: 5.9% (5/85)
	Tremor: 1.2% (1/85)
	Dizziness: 34.5% (30/87)
	Fatigue: 14.9% (13/87)
	Headache: 11.5% (10/87)
	Nausea: 19.5% (17/87)
	Somnolence: 10.3% (9/87)
	Tremor: 12.6% (11/87)
	Dizziness: 2.2% (2/89)
	Fatigue: 6.7% (6/89)
	Headache: 7.9% (7/89)
	Nausea: 5.6% (5/89)
	Somnolence: 3.4% (3/89)
	Tremor: 2.2% (2/89)
Dogra	Back pain: 9.1% (5/55)
2005	Blurred vision: 1.8% (1/55)
US	Diarrhea: 1.8% (1/55)
	Dizziness: 12.7% (7/55)
	Fatigue: 5.5% (3/55)
	Headache: 9.1% (5/55)
	Nausea: 3.6% (2/55)
	Somnolence: 9.1% (5/55)
	Tremor: 3.6% (2/55)
	Vomiting: 3.6% (2/55)
	Back pain: 2.9% (2/70)

Drugs for Neuropathic Pain Page 190 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events
	Blurred vision: 1.4% (1/70)
	Diarrhea: 5.7% (4/70)
	Dizziness: 1.4% (1/70)
	Fatigue: 1.4% (1/70)
	Headache: 1.4% (1/70)
	Nausea: 1.4% (1/70)
	Somnolence: 0.0% (0/70)
	Tremor: 1.4% (1/70)
	Vomiting: 1.4% (1/70)
Khoromi	Anorexia: 0.0% (0/29)
2005	Any adverse event: 86.2% (25/29)
US	Blurred vision: 3.4% (1/29)
	Constipation: 6.9% (2/29)
	Diarrhea: 31.0% (9/29)
	Edema: 3.4% (1/29)
	Fatigue: 34.5% (10/29)
	Headache: 10.3% (3/29)
	Joint pain: 6.9% (2/29)
	Memory difficulty: 3.4% (1/29)
	Paresthesia: 37.9% (11/29)
	Sedation: 34.5% (10/29)
	Speech disorder: 3.4% (1/29)
	Thirst (severe): 3.4% (1/29)
	Tremor: 0.0% (0/29)
	Anorexia: 3.4% (1/29)
	Any adverse event: 72.4% (21/29)
	Blurred vision: 0.0% (0/29)
	Constipation: 0.0% (0/29)
	Diarrhea: 10.3% (3/29)
	Edema: 0.0% (0/29)
	Fatigue: 31.0% (9/29)
	Headache: 10.3% (3/29)
	Joint pain: 3.4% (1/29)
	Memory difficulty: 0.0% (0/29)
	Paresthesia: 20.7% (6/29)
	Sedation: 3.4% (1/29)
	Speech disorder: 0.0% (0/29)
	Thirst (severe): 0.0% (0/29)
	Tremor: 3.4% (1/29)

Drugs for Neuropathic Pain Page 191 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events
Raskin (A)	Accidental injury: 3.8% (8/211)
2004	Anorexia: 10.9% (23/211)
US	Bad taste: 6.6% (14/211)
00	Concentration poor: 5.2% (11/211)
	Diarrhea: 11.4% (24/211)
	Dizziness: 7.1% (15/211)
	Fatigue: 7.1% (15/211)
	Headache: 5.7% (12/211)
	Joint pain: 3.8% (8/211)
	Nausea: 9.5% (20/211)
	Paresthesia: 8.5% (18/211)
	Sinusitis: 6.2% (13/211)
	Somnolence: 10.0% (21/211)
	Upper respiratory tract infection: 9.0% (19/211)
	Accidental injury: 7.3% (8/109)
	Anorexia: 0.9% (1/109)
	Bad taste: 0.0% (0/109)
	Concentration poor: 0.9% (1/109)
	Diarrhea: 3.7% (4/109)
	Dizziness: 5.5% (6/109)
	Fatigue: 1.8% (2/109)
	Headache: 9.2% (10/109)
	Joint pain: 5.5% (6/109)
	Nausea: 5.5% (6/109)
	Paresthesia: 1.8% (2/109)
	Sinusitis: 5.5% (6/109)
	Somnolence: 3.7% (4/109)
	Upper respiratory tract infection: 5.5% (6/109)
Thienel	Anorexia: 5.1% (13/253)
2004	Bad taste: 4.0% (10/253)
Multiple	Confusion: 3.2% (8/253)
	Fatigue: 11.1% (28/253)
	Memory difficulty: 3.2% (8/253)
	Nausea: 9.9% (25/253)
	Paresthesia: 9.1% (23/253)
	Somnolence: 7.9% (20/253)
	Weight loss: 4.0% (10/253)
	Anorexia: 12.1% (45/372)
	Bad taste: 8.1% (30/372)

Drugs for Neuropathic Pain Page 192 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events	
	Confusion: 3.0% (11/372)	
	Fatigue: 16.9% (63/372)	
	Memory difficulty: 5.1% (19/372)	
	Nausea: 12.9% (48/372)	
	Paresthesia: 14.0% (52/372)	
	Somnolence: 12.1% (45/372)	
	Weight loss: 8.9% (33/372)	
	Anorexia: 11.9% (31/260)	
	Bad taste: 8.1% (21/260)	
	Confusion: 6.9% (18/260)	
	Fatigue: 20.0% (52/260)	
	Memory difficulty: 6.9% (18/260)	
	Nausea: 13.1% (34/260)	
	Paresthesia: 11.9% (31/260)	
	Somnolence: 8.8% (23/260)	
	Weight loss: 6.9% (18/260)	
	Anorexia: 3.1% (12/384)	
	Bad taste: 1.0% (4/384)	
	Confusion: 1.0% (4/384)	
	Fatigue: 10.9% (42/384)	
	Memory difficulty: 2.1% (8/384)	
	Nausea: 7.0% (27/384)	
	Paresthesia: 4.9% (19/384)	
	Somnolence: 3.9% (15/384)	
	Weight loss: 1.0% (4/384)	
Drewes	Dizziness: 20.0% (4/20)	
1994	J.==oco. =o.o.,o (=o)	
Denmark		
Dominant	Dizziness: 0.0% (0/20)	
Max (D)	Constipation: 2.2% (1/46)	
1992	Dry mouth: 10.9% (5/46)	
US	Fatigue: 13.0% (6/46)	
	Headache: 23.9% (11/46)	
	Insomnia: 15.2% (7/46)	
	Orthostatic symptoms: 2.2% (1/46)	
	Palpitations: 2.2% (1/46)	
	Sweating increased: 10.9% (5/46)	
	Constipation: % (3/46)	

Drugs for Neuropathic Pain Page 193 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events
	Dry mouth: % (16/46)
	Fatigue: % (8/46)
	Headache: % (4/46)
	Insomnia: % (0/46)
	Orthostatic symptoms: % (0/46)
	Palpitations: % (0/46)
	Sweating increased: % (1/46)
Cardenas 2002	Any adverse event: 97.7% (43/44)
US	Any adverse event: 90.0% (36/40)
Kalso	Anorexia: 20.0% (3/15)
1996	Constipation: 40.0% (6/15)
Finland	Difficult to urinate: 20.0% (3/15)
	Dizziness: 6.7% (1/15)
	Dry mouth: 86.7% (13/15)
	Fatigue: 80.0% (12/15)
	Headache: 33.3% (5/15)
	Nausea: 20.0% (3/15)
	Nightmares: 40.0% (6/15)
	Palpitations: 46.7% (7/15)
	Paresthesia: 0.0% (0/15)
	Sweating increased: 80.0% (12/15)
	Anorexia: 20.0% (3/15)
	Constipation: 13.3% (2/15)
	Difficult to urinate: 0.0% (0/15)
	Dizziness: 0.0% (0/15)
	Dry mouth: 26.7% (4/15)
	Fatigue: 40.0% (6/15)
	Headache: 20.0% (3/15)
	Nausea: 20.0% (3/15)
	Nightmares: 26.7% (4/15)
	Palpitations: 33.3% (5/15)
	Paresthesia: 0.0% (0/15)
	Sweating increased: 40.0% (6/15)
	Anorexia: 21.4% (6/28)
	Constipation: 10.7% (3/28)
	Difficult to urinate: 3.6% (1/28)
	Dizziness: 0.0% (0/28)

Drugs for Neuropathic Pain Page 194 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events
	Dry mouth: 32.1% (9/28)
	Fatigue: 50.0% (14/28)
	Headache: 28.6% (8/28)
	Nausea: 17.9% (5/28)
	Nightmares: 32.1% (9/28)
	Palpitations: 32.1% (9/28)
	Paresthesia: 3.6% (1/28)
	Sweating increased: 50.0% (14/28)
Kieburtz	Confusion: 2.1% (1/47)
1998	Difficult to urinate: 0.0% (0/47)
US	Dizziness: 0.0% (0/47)
	Nausea: 0.0% (0/47)
	Sedation: 21.3% (10/47)
	Confusion: 0.0% (0/48)
	Difficult to urinate: 6.3% (3/48)
	Dizziness: 2.1% (1/48)
	Nausea: 20.8% (10/48)
	Sedation: 0.0% (0/48)
	Confusion: 4.0% (2/50)
	Difficult to urinate: 2.0% (1/50)
	Dizziness: 0.0% (0/50)
	Nausea: 20.0% (10/50)
	Sedation: 0.0% (0/50)
Leijon 1989 Sweden	Any adverse event: 93.3% (14/15)
	Any adverse event: 92.9% (13/14)
	Any adverse event: 46.7% (7/15)
Max (A)	Any adverse event: 96.6% (28/29)
1987	Constipation: 13.8% (4/29)
US	Difficult to urinate: 3.4% (1/29)
	Dizziness: 27.6% (8/29)
	Dry mouth: 89.7% (26/29)
	Mood change: 6.9% (2/29)
	Sedation: 65.5% (19/29)

Drugs for Neuropathic Pain Page 195 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events
	Tinnitus: 3.4% (1/29)
	Any adverse event: 86.2% (25/29)
	Constipation: 0.0% (0/29)
	Difficult to urinate: 3.4% (1/29)
	Dizziness: 10.3% (3/29)
	Dry mouth: 69.0% (20/29)
	Mood change: 0.0% (0/29)
	Sedation: 41.4% (12/29)
	Tinnitus: 0.0% (0/29)
Max (C)	Concentration poor: 5.2% (3/58)
1988	Difficult to urinate: 12.1% (7/58)
US	Dizziness: 19.0% (11/58)
	Dry mouth: 62.1% (36/58)
	Mood change: 5.2% (3/58)
	Sedation: 62.1% (36/58)
	Tinnitus: 5.2% (3/58)
	Concentration poor: 0.0% (0/58)
	Difficult to urinate: 0.0% (0/58)
	Dizziness: 32.8% (19/58)
	Dry mouth: 29.3% (17/58)
	Mood change: 17.2% (10/58)
	Sedation: 65.5% (38/58)
	Tinnitus: 0.0% (0/58)
	Concentration poor: 0.0% (0/58)
	Difficult to urinate: 0.0% (0/58)
	Dizziness: 24.1% (14/58)
	Dry mouth: 39.7% (23/58)
	Mood change: 0.0% (0/58)
	Sedation: 39.7% (23/58)
	Tinnitus: 3.4% (2/58)
Robinson	Blurred vision: 5.6% (1/18)
2004	Constipation: 22.2% (4/18)
US	Diarrhea: 5.6% (1/18)
	Difficult to urinate: 5.6% (1/18)
	Dizziness: 11.1% (2/18)
	Dry mouth: 72.2% (13/18)
	Gastrointestinal AEs: 0.0% (0/18)
	Headache: 0.0% (0/18)
	Insomnia: 11.1% (2/18)

Drugs for Neuropathic Pain Page 196 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events
	Nausea: 11.1% (2/18)
	Palpitations: 0.0% (0/18)
	Somnolence: 50.0% (9/18)
	Sweating increased: 0.0% (0/18)
	Tinnitus: 5.6% (1/18)
	Tremor: 0.0% (0/18)
	Blurred vision: 26.3% (5/19)
	Constipation: 15.8% (3/19)
	Diarrhea: 5.3% (1/19)
	Difficult to urinate: 5.3% (1/19)
	Dizziness: 15.8% (3/19)
	Dry mouth: 68.4% (13/19)
	Gastrointestinal AEs: 15.8% (3/19)
	Headache: 5.3% (1/19)
	Insomnia: 10.5% (2/19)
	Nausea: 0.0% (0/19)
	Palpitations: 10.5% (2/19)
	Somnolence: 47.4% (9/19)
	Sweating increased: 5.3% (1/19)
	Tinnitus: 5.3% (1/19)
	Tremor: 5.3% (1/19)
Vrethem	Cold feet: 0.0% (0/35)
1997	Difficult to urinate: 2.9% (1/35)
Sweden	Dry mouth: 34.3% (12/35)
	Hyperglycemia: 2.9% (1/35)
	Nausea: 2.9% (1/35)
	Nose stuffy: 2.9% (1/35)
	Sedation: 34.3% (12/35)
	Tachycardia: 0.0% (0/35)
	Thirst (severe): 2.9% (1/35)
	Urticaria: 0.0% (0/35)
	Vertigo: 20.0% (7/35)
	Cold feet: 2.9% (1/34)
	Difficult to urinate: 0.0% (0/34)
	Dry mouth: 41.2% (14/34)
	Hyperglycemia: 0.0% (0/34)
	Nausea: 2.9% (1/34)
	Nose stuffy: 0.0% (0/34)
	Sedation: 8.8% (3/34)

Drugs for Neuropathic Pain Page 197 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events
-	
	Tachycordia: 2.00/ (4/24)
	Tachycardia: 2.9% (1/34)
	Thirst (severe): 2.9% (1/34)
	Urticaria: 2.9% (1/34)
	Vertigo: 29.4% (10/34)
	Cold feet: 0.0% (0/33)
	Difficult to urinate: 0.0% (0/33)
	Dry mouth: 6.1% (2/33)
	Hyperglycemia: 0.0% (0/33)
	Nausea: 0.0% (0/33)
	Nose stuffy: 0.0% (0/33)
	Sedation: 9.1% (3/33)
	Tachycardia: 0.0% (0/33)
	Thirst (severe): 0.0% (0/33)
	Urticaria: 0.0% (0/33)
	Vertigo: 3.0% (1/33)
Panerai	Any adverse event: 56.4% (22/39)
1990	, ,
Italy	Any adverse event: 59.0% (23/39)
	Any adverse event: 25.6% (10/39)
	,
Kishore-Kumar	Bad taste: 10.5% (2/19)
1990	Constipation: 73.7% (14/19)
US	Difficult to urinate: 26.3% (5/19)
	Dizziness: 36.8% (7/19)
	Dry mouth: 73.7% (14/19)
	Insomnia: 21.1% (4/19)
	Itching: 0.0% (0/19)
	Palpitations: 10.5% (2/19)
	Sedation: 31.6% (6/19)
	Shakiness: 10.5% (2/19)
	Sweating increased: 21.1% (4/19)
	, ,
	Bad taste: 10.5% (2/19)
	Constipation: 15.8% (3/19)
	Difficult to urinate: 5.3% (1/19)
	Dizziness: 26.3% (5/19)
	Dry mouth: 47.4% (9/19)
	Insomnia: 0.0% (0/19)
	Itching: 10.5% (2/19)

Drugs for Neuropathic Pain Page 198 of 200

Final Evidence Tables

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events	
	Palpitations: 0.0% (0/19)	
	Sedation: 0.0% (0/19)	
	Shakiness: 5.3% (1/19)	
	Sweating increased: 0.0% (0/19)	
Max (B)	Constipation: 30.0% (6/20)	
1991	Dry mouth: 40.0% (8/20)	
US	Insomnia: 35.0% (7/20)	
00	Orthostatic symptoms: 30.0% (6/20)	
	Palpitations: 15.0% (3/20)	
	Sedation: 40.0% (8/20)	
	Sweating increased: 15.0% (3/20)	
	Constipation: 20.0% (4/20)	
	Dry mouth: 45.0% (9/20)	
	Insomnia: 15.0% (3/20)	
	Orthostatic symptoms: 5.0% (1/20)	
	Palpitations: 5.0% (1/20)	
	Sedation: 40.0% (8/20)	
	Sweating increased: 5.0% (1/20)	
Kvinesdal	Difficult to urinate: 13.3% (2/15)	
1984	Dry mouth: 60.0% (9/15)	
Denmark	Difficult to urinate: 0.0% (0/15)	
	Dry mouth: 6.7% (1/15)	
Sindrup (C) 1989	Dry mouth: 61.5% (8/13)	
Denmark	Dry mouth: 30.8% (4/13)	
Hammack	Constipation: 41.3% (19/46)	
2002	Difficult to urinate: 4.3% (2/46)	
US	Dry mouth: 63.0% (29/46)	
	Nausea: 8.7% (4/46)	
	Sedation: 30.4% (14/46)	
	Constipation: 22.2% (10/45)	
	Difficult to urinate: 6.7% (3/45)	
	Dry mouth: 31.1% (14/45)	
	Nausea: 6.7% (3/45)	
	Sedation: 26.7% (12/45)	
Panerai	Any adverse event: 56.4% (22/39)	
1990		

Drugs for Neuropathic Pain Page 199 of 200

Evidence Table 13. Adverse events in placebo-controlled trials of other antiepileptics, tricyclic antidepressants, SSRIs and dextromethorphan for neuropathic pain

Study	Specific adverse events
Italy	Any adverse event: 59.0% (23/39)
	Any adverse event: 25.6% (10/39)

Drugs for Neuropathic Pain Page 200 of 200