

Supplemental Materials for

A systematic review of acupuncture for chemotherapy-induced peripheral neuropathy (CIPN)

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Supplemental Appendix 1: Systematic Search Protocol

Ovid Search Strategy:

The same search strategy was used for MEDLINE, EMBASE, and Cochrane Central Register of Controlled Trials (CENTRAL), since all three databases were searched using OVID.

Supplemental Table 1: Search Strategy for Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) 1946 to Present

#	Searches	Results
1	exp Peripheral Nervous System Diseases/	134025
2	exp Neuralgia/	17197
3	(neuropath* or neuralgi* or peripheral neuropathy).mp.	138232
4	or/1-3	218908
5	exp Acupuncture/	1482
6	exp Acupuncture Therapy/	20791
7	exp Acupuncture Analgesia/	1131
8	(acupuncture or acupressure or electroacupuncture or electro-acupuncture or acupoint*).mp.	25329
9	or/5-8	26117
10	exp Drug Therapy/	1227888
11	(chemotherapy or CIPN or chemotherapy induced peripheral neuropathy or chemically induced disorder).mp.	376353
12	(Paclitaxel or Oxaliplatin or Taxane).mp.	43600
13	exp Neoplasms/	2998474
14	cancer.mp.	1379147
15	or/10-14	4292479
16	4 and 9 and 15	136
17	random*.mp.	1138594
18	16 and 17	41

Supplemental Table 2: Search Strategy for: Embase 1974 to 2017 May 04

#	Searches	Results
1	exp Peripheral Nervous System Diseases/	59697
2	exp Neuralgia/	87647
3	(neuropath* or neuralgi* or peripheral neuropathy).mp.	280224
4	or/1-3	317004
5	exp Acupuncture/	39574
6	exp Acupuncture Therapy/	39574
7	exp Acupuncture Analgesia/	1472
8	(acupuncture or acupressure or electroacupuncture or electro-acupuncture or acupoint*).mp.	41757
9	or/5-8	41801
10	exp Drug Therapy/	2161553
11	(chemotherapy or CIPN or chemotherapy induced peripheral neuropathy or chemically induced disorder).mp.	762691
12	(Paclitaxel or Oxaliplatin or Taxane).mp.	122586
13	exp Neoplasms/	3788182
14	cancer.mp.	2742045
15	or/10-14	5838587
16	4 and 9 and 15	745
17	random*.mp.	1358950
18	16 and 17	158

Supplemental Table 3: Search Strategy for EBM Reviews - Cochrane Central Register of Controlled Trials (CENTRAL)

#	Searches	Results
1	exp Peripheral Nervous System Diseases/	3066
2	exp Neuralgia/	765
3	(neuropath* or neuralgi* or peripheral neuropathy).mp.	7858
4	or/1-3	9193
5	exp Acupuncture/	133
6	exp Acupuncture Therapy/	3591
7	exp Acupuncture Analgesia/	263
8	(acupuncture or acupressure or electroacupuncture or electro-acupuncture or acupoint*).mp.	9793
9	or/5-8	9860
10	exp Drug Therapy/	123878
11	(chemotherapy or CIPN or chemotherapy induced peripheral neuropathy or chemically induced disorder).mp.	40209
12	(Paclitaxel or Oxaliplatin or Taxane).mp.	6957
13	exp Neoplasms/	48905
14	cancer.mp.	77081
15	or/10-14	207244
16	4 and 9 and 15	24
17	random*.mp.	563670
18	16 and 17	21

Supplemental Table 4: Search Strategy for CINAHL (EBSCO)

#	Query	Results
S1	(MH "Acupuncture+")	11,913
S2	(MH "Acupuncture Anesthesia")	15
S3	(MH "Acupuncture Analgesia")	295
S4	TX (acupunct* or acupressure or electroacupuncture or electro-acupuncture or acupoint*)	26,433
S5	S1 OR S2 OR S3 OR S4	26,514
S6	(MH "Peripheral Nervous System Diseases+")	32,199
S7	(MH "Neuralgia+")	4,759
S8	TX (Neurpath* OR Neuralg* OR "peripheral neuropathy")	15,586
S9	S6 OR S7 OR S8	41,567
S10	(MH "Chemotherapy, Adjuvant+")	8,100
S11	(MH "Chemotherapy, Cancer+")	21,646
S12	(MH "Antineoplastic Agents, Combined")	16,104
S13	TX (chemotherap* OR "Drug Therapy" OR CIPN OR "chemotherapy induced peripheral neuropathy" or "chemically induced disorder")	478,078
S14	(MH "Neoplasms, Germ Cell and Embryonal+")	26,051
S15	TX (cancer)	510,359
S16	S10 OR S11 OR S12 OR S13 OR S14 OR S15	874,598
S17	S5 AND S9 AND S16	532
S18	TX (random*)	469,222
S19	S17 AND S18	324

Supplemental Table 5: Search Strategy for Web of Science

#	Searches	Results
1	TS = (neuropath* OR neuralgi* OR "peripheral neuropathy") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI</i> <i>Timespan=All years</i>	143,728
2	TS = (Chemotherap* OR "Drug Therapy" OR CIPN OR "chemotherapy induced peripheral neuropathy" or "chemically induced disorder") <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI</i> <i>Timespan=All years</i>	405,979
3	TS = (cancer OR neoplasm) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI</i> <i>Timespan=All years</i>	1,994,891
4	#3 OR #2 <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI</i> <i>Timespan=All years</i>	2,159,848
5	TS = (Acupunct* OR acupressure OR electroacupuncture OR electro- acupuncture or acupoint*) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI</i> <i>Timespan=All years</i>	17,910
6	#5 AND #4 AND #1 <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI</i> <i>Timespan=All years</i>	89
7	TS = (random*) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI</i> <i>Timespan=All years</i>	1,495,258
8	#7 AND #6 <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI</i> <i>Timespan=All years</i>	44

Search Strategy for Clinical Trials.gov

Combinations of the terms acupuncture and chemotherapy-induced peripheral neuropathy were entered into the "Search Terms" search box yielding sixteen (16) results.

Supplemental Appendix 2: Reasons for article exclusion**Supplemental Table 7: Reasons for article exclusion**

Authors	Study	Reason for exclusion
Awad 2015 ⁽¹⁾	Randomized sham controlled pilot trial of weekly electro-acupuncture for the prevention of taxane-induced peripheral neuropathy.	Assessed prevention of CIPN; Previous publication of Greenlee 2016
Cai 2013 ⁽²⁾	Acupuncture combined with methylcobalamin for chemotherapy-induced peripheral neuropathy of patients with myeloma.	Conference abstract of Han 2017 study
Sima 2009 ⁽³⁾	Randomized clinical trial on the effectiveness of electroacupuncture for neuropathic cancer pain	Did not assess CIPN
Sima 2009 ⁽⁴⁾	Efficacy of electroacupuncture for bone metastatic cancer patients with neuropathic pain: A randomized controlled trial	Did not assess CIPN
Minton 2007 ⁽⁵⁾	Electroacupuncture as an Adjunctive Treatment to Control Neuropathic Pain in Patients with Cancer	Did not assess CIPN
Akhileswaran 2010 ⁽⁶⁾	A randomized controlled trial (RCT) using different acupuncture techniques for better pain relief in hospice patients with chronic cancer pain	Did not assess CIPN
Visovsky 2008 ⁽⁷⁾	Evaluation and management of peripheral neuropathy in diabetic patients with cancer.	Did not assess CIPN
Xu 2010 ⁽⁸⁾	[Clinical randomized controlled study on acupuncture for treatment of peripheral neuropathy induced by chemotherapeutic drugs].	Full text was in Chinese
Cao 2015 ⁽⁹⁾	Electroacupuncture reduces peripheral neurotoxicity and improves quality of life in cancer patients with Vinca alkaloids chemotherapy	Inadequate control; compared 2 types of acupuncture
Schroeder 2012 ⁽¹⁰⁾	Acupuncture for chemotherapy-induced peripheral neuropathy (CIPN): a pilot study using neurography.	Non-RCT
Bao 2014 ⁽¹¹⁾	A pilot study of acupuncture in treating bortezomib-induced peripheral neuropathy in patients with multiple myeloma	Non-RCT
Hsieh 2016 ⁽¹²⁾	Laser acupuncture attenuates oxaliplatin-induced peripheral neuropathy in patients with gastrointestinal cancer: a pilot prospective cohort study	Non-RCT
Wang 2011 ⁽¹³⁾	Electroacupuncture is an effective therapeutic modality for bortezomibor thalidomide-induced peripheral neuropathy in patients with multiple myeloma: A pilot study	Non-RCT
Garcia 2014 ⁽¹⁴⁾	Electroacupuncture for thalidomide/bortezomib-induced peripheral neuropathy in multiple myeloma: a feasibility study.	Non-RCT
Paley 2015 ⁽¹⁵⁾	Acupuncture for cancer pain in adults	Non-RCT (Systematic Review). Did not assess CIPN
Kessler 2010 ⁽¹⁶⁾	Acupuncture and the treatment of cancer pain.	Non-RCT (Systematic Review). Did not assess CIPN
Kim 2013 ⁽¹⁷⁾	Electroacupuncture reduces peripheral neurotoxicity and improves quality of life in cancer patients with Vinca alkaloids chemotherapy	Protocol
Kim 2016 ⁽¹⁸⁾	Electroacupuncture for chemotherapy-induced peripheral neuropathy: A pilot multicenter randomized, patient-assessor blinded, controlled trial.	Protocol.
Bao 2013 ⁽¹⁹⁾	Acupuncture to prevent chemotherapy dose reduction due to chemotherapy-induced peripheral neuropathy in breast cancer patients	Protocol/ongoing
Xiong 2016 ⁽²⁰⁾	Clinical efficacy of acupoint injection for chemotherapy-induced peripheral neuropathy of patients with breast cancer	Wrong treatment (acupoint injection)
Ogawa 2013 ⁽²¹⁾	Efficacy of Contact Needle Therapy for Chemotherapy-Induced Peripheral Neuropathy.	Wrong treatment (contact needle therapy)
Yoon 2012 ⁽²²⁾	Sweet bee venom pharmacopuncture for chemotherapy-induced peripheral neuropathy.	Wrong treatment (pharmacopuncture)
Wong 2015 ⁽²³⁾	Phase 2 Study of Acupuncture-Like Transcutaneous Nerve Stimulation for Chemotherapy-Induced Peripheral Neuropathy.	Wrong treatment (transcutaneous nerve stimulation)

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