

Table 1: Systematic reviews of acupuncture for chemotherapy-associated nausea and vomiting

Source: Karen Pilkington, Vinjar Fønnebø, CAM-Cancer Consortium. [Acupuncture for chemotherapy-associated nausea and vomiting \[online document\]](#), July 2019

First author, year (ref)	Main outcomes/focus	Number of studies Type of studies Number of patients	Main results/ Conclusions	Comments (searches, quality)
Chao et al. 2009 (11)	Acupoint stimulation for the management of therapy related adverse events in breast cancer patients	11 trials (including 9 RCTs) 761 patients	Stimulation of acupoints (mainly P6) reduced nausea and/or vomiting.	8 databases were searched (English and Chinese) Included controlled and uncontrolled trials Quality assessed using modified Jadad scale. 3 studies assessed as high quality; 2 of these used acupressure at P6 and 1 used electro acupuncture at points ST36 and P6. Concerns about reliability of the conclusions of this review according to DARE assessment.
Chen et al. 2013 (12)	Lung cancer; various outcomes (acupoint stimulation as an adjunct therapy for lung cancer)	Unclear (8 RCTs according to text but references do not match table) 2 or 3 RCTs of acupuncture and 2 RCTs of acupressure (other studies are of moxibustion or injection at acupoints)	*'Subgroup analysis showed that acupoint needle insertion, acupoint injection with herbs, and moxibustion significantly attenuated the grade of nausea and vomiting (P = 0.02, P = 0.005, and P = 0.01, respectively). '	<i>16 databases (English and Chinese) were searched to January 2013.</i> <i>Cochrane risk of bias criteria were used for assessment of trials.</i> <i>*Note: these results cannot be confirmed as studies in the meta-analysis and text do not match table of results. Also the 'herb' injected in one study was vitamin B6 according to the table</i>
Cheon et al. 2014 (14)	Pharmacopuncture* in cancer-related symptoms	5 RCTs on chemotherapy-induced nausea and vomiting (CINV) included in meta-analysis 22 RCTs in total 2,459 patients	'Severity of CINV significantly reduced by pharmacopuncture compared with control group (3 trials, risk ratio (RR) 1.28, 95% confidence interval (CI) = 1.14-1.44). Frequency of CINV also significantly reduced with pharmacopuncture (2 trials, RR 2.47, 95% CI = 2.12-2.89)'	*Note that the treatment involved injecting conventional anti-emetics at acupuncture points.

Ezzo et al. 2005 (1)	Acupuncture and/or acupressure in chemotherapy-induced nausea and vomiting in adults	11 RCTs 1247 patients	'acupuncture-point stimulation of all methods combined reduced the incidence of acute vomiting (RR = 0.82; 95% confidence interval (CI) 0.69 to 0.99; P = 0.04), but not acute or delayed nausea severity compared to control' P6 was the most commonly used acupuncture point.	9 databases (all English language) plus conference abstracts were searched. Last assessed as up-to-date in 2006. Used 5 criteria for assessment of quality. Overall assessment of quality was not reported. <i>Note: Review due to be updated in 2014. Authors unable to complete in timescale therefore withdrawn from Cochrane Library</i>
Garcia et al. 2013 (13)	Acupuncture in cancer care	11 RCTs on CINV (41 RCTs in total)	'Acupuncture is an appropriate adjunctive treatment for chemotherapy-induced nausea/vomiting, but additional studies are needed.' Between group effect size for acupuncture versus usual care ranged from 0.94 to 1.10. Nonspecific aspects contribute to acupuncture but the specific effects are larger	Searched 6 databases (English language) to December 2011. Risk of bias assessed using Cochrane criteria. Trial assessment: 8 high risk of bias, 2 unclear risk and 1 with low risk of bias.
Huang et al. 2017	Moxibustion for chemotherapy-induced nausea and vomiting	16 RCTs 1123 patients	Moxibustion was reported to be more effective than no treatment (RR: 2.04, 95% CI: 1.42–2.93) or antiemetic drugs (RR: 1.87, 95% CI: 1.27–2.76) but no conclusive evidence on enhancing the effects of antiemetic drugs.	Searched 8 databases (Chinese and English) and 2 trial registries to February 2017. Risk of bias assessed using Cochrane criteria Overall risk of bias was not reported but concerns raised with selection bias, lack of blinding and inconsistent data in some trials.
Song et al. 2015 (15)	Self-acupressure for symptoms of various conditions including cancer	1 RCT and 1 quasi-RCT on CINV (8 RCTs and 2 quasi-RCTs in total)	Positive effects reported for primary outcomes of self-acupressure therapy for various symptoms, including significant improvements in nausea and vomiting in cancer	Searched 12 databases (English, Korean, Chinese, and Japanese) Risk of bias assessed using Cochrane criteria Overall assessment of all RCTs: moderate quality, with 50% or more assessed as a low risk of bias in seven domains (CINV RCT assessed as low risk on 4 of 7 domains)

Tan et al. 2014 (16)	Auricular therapy for chemotherapy-induced nausea and vomiting in cancer patients	21 RCTs 1713 patients	Meta-analysis was deemed inappropriate due to low quality of studies. Results are reported as percentage of patients in which treatment was effective (for acute CINV 44.44% to 93.33% in the intervention groups and 15% to 91.67% in the control groups; for delayed CINV, 62.96% to 100% and 25% to 100%, respectively).	Searched 12 databases (Chinese and English) to May 2014 Risk of bias assessed using Cochrane criteria Overall risk of bias not reported but significant methodological flaws were identified and level of evidence judged as low.
Zhang et al. 2018	Moxibustion for alleviating side effects of chemotherapy or radiotherapy	29 RCTs (for all indications) 8 trials on CINV 851 participants	Low-certainty evidence from one study showed reductions in symptom scores for nausea and vomiting (MD -38.57 points, 95% CI -48.67 to -28.47) compared with sham moxibustion. Low-certainty evidence showed that moxibustion plus conventional treatment was associated with lower symptom scores for nausea and vomiting (RR 0.43, 95% CI 0.25 to 0.74; 7 studies, 801participants; I ² = 19%)	Searched 10 databases (Chinese and English) to August 2017 Risk of bias assessed using Cochrane criteria Overall risk of bias was high in all the studies on CINV.