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). '	16 databases (English and Chinese) were searched to January 2013. Cochrane risk of bias criteria were used for assessment of trials. *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
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.	Acupuncture and/or	11 RCTs	'acupuncture-point stimulation of all	9 databases (all English language) plus
2005 (1)	acupressure in chemotherapy-	1247 patients	methods combined reduced the incidence	conference abstracts were searched. Last
	induced nausea and vomiting		of acute vomiting (RR = 0.82; 95%	assessed as up-to-date in 2006.
	in adults		confidence interval (CI) 0.69 to 0.99; P =	Used 5 criteria for assessment of quality.
			0.04), but not acute or delayed nausea	Overall assessment of quality was not
			severity compared to control'	reported.
			P6 was the most commonly used	Note: Review due to be updated in 2014.
			acupuncture point.	Authors unable to complete in timescale
				therefore withdrawn from Cochrane Library
Garcia et al.	Acupuncture in cancer care	11 RCTs on CINV	'Acupuncture is an appropriate adjunctive	Searched 6 databases (English language) to
2013 (13)		(41 RCTs in total)	treatment for chemotherapy-induced	December 2011.
			nausea/vomiting, but additional studies are	Risk of bias assessed using Cochrane criteria.
			needed.'	Trial assessment: 8 high risk of bias, 2 unclear
			Between group effect size for acupuncture	risk and 1 with low risk of bias.
			versus usual care ranged from 0.94 to 1.10.	
			Nonspecific aspects contribute to	
			acupuncture but the specific effects are	
			larger	
Huang et al.	Moxibustion for	16 RCTs	Moxibustion was reported to be more	Searched 8 databases (Chinese and English)
2017	chemotherapy-induced	1123 patients	effective than no treatment (RR: 2.04, 95%	and 2 trial registries to February 2017.
	nausea and vomiting		CI: 1.42–2.93) or antiemetic drugs (RR:	Risk of bias assessed using Cochrane criteria
			1.87, 95% CI: 1.27–2.76) but no conclusive	Overall risk of bias was not reported but
			evidence on enhancing the effects of	concerns raised with selection bias, lack of
			antiemetic drugs.	blinding and inconsistent data in some trials.
Song et al.	Self-acupressure for	1 RCT and 1 quasi-RCT	Positive effects reported for primary	Searched 12 databases (English, Korean,
2015 (15)	symptoms of various	on CINV	outcomes of self-acupressure therapy for	Chinese, and Japanese)
	conditions including cancer	(8 RCTs and 2 quasi-	various symptoms, including significant	Risk of bias assessed using Cochrane criteria
		RCTs in total)	improvements in nausea and vomiting in	Overall assessment of all RCTs: moderate
			cancer	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.	Auricular therapy for	21 RCTs	Meta-analysis was deemed inappropriate	Searched 12 databases (Chinese and English) to
2014 (16)	chemotherapy-induced	1713 patients	due to low quality of studies. Results are	May 2014
	nausea and vomiting in cancer		reported as percentage of patients in	Risk of bias assessed using Cochrane criteria
	patients		which treatment was effective (for acute	Overall risk of bias not reported but significant
			CINV 44.44% to 93.33% in the intervention	methodological flaws were identified and level
			groups and 15% to 91.67% in the control	of evidence judged as low.
			groups; for delayed CINV, 62.96% to 100%	
			and 25% to 100%, respectively).	
Zhang et al.	Moxibustion for alleviating	29 RCTs (for all	Low-certainty evidence from one study	Searched 10 databases (Chinese and English) to
2018	side effects of chemotherapy	indications)	showed reductions in symptom scores for	August 2017
	or radiotherapy	8 trials on CINV	nausea and vomiting (MD -38.57 points,	Risk of bias assessed using Cochrane criteria
		851 participants	95% CI –48.67 to –28.47) compared with	Overall risk of bias was high in all the studies
			sham moxibustion.	on CINV.
			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%)	