Table des matières

chemotherapy-induced nausea and vomiting

Nausées-vomissements chimio-induits

1. Systematic Reviews and Meta-Analysis

1.1. Generic Acupuncture

1.1.1. Lin 2026

Lin R, Guo Z, Zhang J, Wang L, Zhang L, Tang X, Liu W, Cui S, Xu N. Acupuncture for nausea and vomiting induced by highly emetogenic chemotherapy: a systematic review and meta-analysis. Front Neurol. 2026;16:1692411. https://doi.org/10.3389/fneur.2025.1692411

Background	Acupuncture shows potential in treating nausea and vomiting (CINV) induced by highly emetogenic chemotherapy (HEC). However, the certainty of its efficacy evidence remains unclear, warranting a comprehensive evaluation.
Methods	Two independent reviewers systematically searched eight databases from inception to December 2024 to identify eligible randomized controlled trials (RCTs). Relevant data were extracted using a standardized form, and risk of bias was assessed using the Cochrane risk of bias tool version 2.0 (ROB 2.0). Meta-analysis was performed using R Studio 4.4 software. Subgroup analysis was conducted based on acupuncture type. Additionally, publication bias was detected using appropriate methods according to the heterogeneity of different outcomes, where appropriate. Finally, evidence quality was rated using the GRADE system.
Results	A total of **58 RCTs** were included in this meta-analysis. Rob 2.0 result indicated that most studies were at high risk of bias, with low methodological quality. For the primary outcome, acupuncture significantly improved the complete control rate during the overall (RR 1.54, 95% CI 1.36-1.75; P < 0.001; I2 = 36%) and the delayed phase (RR 1.56, 95% CI 1.32-1.86; P < 0.001; I2 = 0%). For other CINV outcomes, acupuncture demonstrated considerable therapeutic potential for vomiting-related outcomes, while uncertainty in alleviating nausea symptoms. Subgroup analyses showed that different acupuncture types had distinct advantages. Sensitivity analyses for several outcomes were unstable, and there were indications of publication bias. According to GRADE, only the acute vomiting duration score was rated as moderate quality; all other outcomes were rated as low or very low quality.
Conclusion	Although acupuncture for HEC-induced CINV shows some positive effects, there are various limitations that render the current evidence insufficient to conclusively establish its efficacy; therefore, further high-quality studies are required.

1.1.2. Kim 2025

Kim SA, Yeo S, Lim S. Effectiveness and safety of acupuncture for nausea and vomiting in cancer patients: a systematic review and meta-analysis. Medicina (Kaunas). 2025 Jul 17;61(7):1287. https://doi.org/10.3390/medicina61071287

Background	Nausea and vomiting (NV) are common and distressing adverse effects among cancer patients undergoing chemotherapy, radiotherapy, or surgery. Pharmacological antiemetics are widely used but often insufficient, with potential for drug interactions and side effects. Acupuncture has been proposed as a complementary strategy, though evidence synthesis across all emetogenic treatments remains limited.
Objective	To evaluate the effectiveness and safety of acupuncture in the management of nausea and vomiting among cancer patients receiving emetogenic therapies.
Methods	A comprehensive search of three electronic databases and two clinical trial registries was conducted from inception to December 2024 for randomized controlled trials (RCTs) assessing acupuncture for NV in cancer patients. Risk ratios (RRs) and 95% confidence intervals (CIs) were calculated using random-effects models. Adverse events were assessed using the Common Terminology Criteria for Adverse Events (CTCAE).
Results	**Seventeen RCTs** met inclusion criteria, and twelve were included in the quantitative meta-analysis. Acupuncture did not significantly affect acute nausea (RR = 0.98, 95% CI 0.84–1.15; p = 0.80) or acute vomiting (RR = 0.93, 95% CI 0.65–1.32; p = 0.67), but it significantly reduced delayed vomiting (RR = 0.76, 95% CI 0.61–0.95; p = 0.02). Subgroup analysis showed stronger effects with ≥5 days of treatment (RR = 0.56, 95% CI 0.39–0.81; p = 0.002). Commonly used acupoints included PC6, ST36, CV12, LI4, LR3, and ST25. No serious adverse events were reported; minor events (mild bleeding or bruising) were rare.
Conclusion	Acupuncture is a safe and effective complementary therapy for reducing delayed vomiting in cancer patients undergoing emetogenic treatments. Optimal benefits are achieved with treatment courses of at least five days targeting key acupoints such as PC6 and ST36. Further high-quality RCTs are needed to standardize treatment protocols and clarify effects on nausea and overall symptom control.

1.1.3. Wang 2025 (network Meta-analysis)

Wang Y, Wang F, Hu F, Long F. Effect of non-pharmacological interventions on chemotherapy induced delayed nausea and vomiting for tumors: a systematic review and Bayesian network Meta-analysis. Complement Ther Med. 2025 Jan 9:103124. https://doi.org/10.1016/j.ctim.2024.103124

Objective	To evaluate the efficacy of non-pharmacological interventions in improving chemotherapy induced delayed nausea and vomiting symptoms using a network meta-analysis.
Methods	Four Chinese databases (CNKI, Wanfang Data Knowledge Service Platform, VIP, Sinomed) and five English databases (PubMed, Cochrane Library, Embase, Web of Science, CINAHL) were searched from the establishment of the database to April 2024. A Bayesian network meta-analysis was performed on the response rate to the improvement of chemotherapy induced delayed nausea and vomiting, as well as improvement in KPS score, under different non-pharmacological interventions by using R 4.1.3 software and the GeMTC package.
Results	A total of **58 RCTs 4081 patients** were selected involving 14 non-pharmacological interventions. The results of Meta-analysis showed that **acupoint patch** was identified as the most probable superior intervention in the improvement of chemotherapy induced delayed nausea and vomiting, and **acupuncture** was identified as the most probable superior intervention on the improvement of KPS scores.

Conclusion	Non-pharmacological interventions can serve as an effective complementary approach to managing delayed chemotherapy-induced nausea and vomiting. In particular, acupoint application may be the optimal complementary therapy to mitigate the incidence of delayed nausea and vomiting, though more high-quality, large-scale evidence is required to conclusively demonstrate the efficacy of acupuncture in enhancing the quality of life for cancer patients.

1.1.4. Yu 2024

Yu C, Mao X, Zhou C. Influence of acupuncture and moxibustion on gastrointestinal function and adverse events in gastric cancer patients after surgery and chemotherapy: a meta-analysis. Support Care Cancer. 2024 Jul 18;32(8):524. https://doi.org/10.1007/s00520-024-08740-8

Objective	The impact of acupuncture and moxibustion on postoperative complications and adverse events (AEs) of chemotherapy in patients with gastric cancer (GC) has been investigated. Through a meta-analysis of existing randomized controlled trials (RCTs), this study sought to strengthen the evidentiary basis to help investigators further understand the effects of moxibustion and acupuncture on postoperative complications and AEs of chemotherapy among GC patients.
Methods	Embase, Web of Science, PubMed, The Cochrane Library, China National Knowledge Infrastructure (CNKI), Wanfang Database, and VIP Database for Chinese Technical Periodicals were searched to collect RCTs on effects of acupuncture and moxibustion on gastrointestinal function and AEs among GC patients undergoing surgery and chemotherapy. Outcome measures included postoperative gastrointestinal recovery (bowel sound recovery time, time to first flatus/defecation/feeding), the incidence of AEs (nausea and vomiting, abdominal distension, and diarrhea), myelosuppression (white blood cells, hemoglobin, and platelet), and immune function indicators (CD3+ and CD4+). To assess quality, the Cochrane Risk of Bias Tool was utilized. Review Manager 5.4 was implemented to do the meta-analysis.
Results	**Fifteen eligible RCTs involved 1259 patients**. Meta-analysis results showed that the experimental group had a significantly shorter bowel sound recovery time (MD = - 14.57, 95% CI = [- 18.97, - 10.18], P < 0.00001), time to first flatus (MD = - 17.56, 95% CI = [- 22.23, - 12.88], P < 0.00001), time to first defecation (MD = - 17.05, 95% CI = [- 21.02, - 13.09], P < 0.00001), and time to first feeding (MD = - 23.49, 95% CI = [- 28.81, - 18.17], P < 0.00001) than the control group. There were significant decreases in the incidence of nausea and vomiting (RR = 0.46, 95% CI = [0.21, 1.02], P = 0.05) and abdominal distension (RR = 0.45, 95% CI = [0.27, 0.75], P = 0.002) observed in the experimental group in comparison with the control group. The experimental group demonstrated a significant increase in white blood cell counts in comparison with to the control group (MD = 0.89, 95% CI = [0.23, 1.55], P = 0.008). The experimental group showed significantly higher levels of CD3+ (MD = 7.30, 95% CI = [1.86, 12.74], P = 0.009) and CD4+ (MD = 2.75, 95% CI = [1.61, 3.90], P < 0.00001) than the control group.
Conclusion	Among GC patients, acupuncture and moxibustion can aid in gastrointestinal function recovery, reduce the incidence of AEs of surgery and chemotherapy, and improve immune function.

1.1.5. Yan 2023 ★

Yan Y, López-Alcalde J, Zhang L, Siebenhüner AR, Witt CM, Barth J. Acupuncture for the prevention of chemotherapy-induced nausea and vomiting in cancer patients: A systematic review and meta-analysis. Cancer Med. 2023 Jun;12(11):12504-12517. https://doi.org/10.1002/cam4.5962

Purpose	To assess the effectiveness and safety of acupuncture for the prevention of chemotherapy-induced nausea and vomiting (CINV), with a specific intention on exploring sources of between-study variation in treatment effects.
Methods	MEDLINE, EMBASE, Cochrane CENTRAL, CINAHL, Chinese Biomedical Literature Database, VIP Chinese Science and Technology Periodicals Database, China National Knowledge Infrastructure, and Wanfang were searched to identify randomized controlled trials (RCTs) that compared acupuncture to sham acupuncture or usual care (UC). The main outcome is complete control (no vomiting episodes and/or no more than mild nausea) of CINV. GRADE approach was used to rate the certainty of evidence.
Results	**Thirty-eight RCTs with a total of 2503 patients** were evaluated. Acupuncture in addition to UC may increase the complete control of acute vomiting (RR, 1.13; 95% CI, 1.02 to 1.25; 10 studies) and delayed vomiting (RR, 1.47; 95% CI, 1.07 to 2.00; 10 studies) when compared with UC only. No effects were found for all other review outcomes. The certainty of evidence was generally low or very low. None of the predefined moderators changed the overall findings, but in an exploratory moderator analysis we found that an adequate reporting of planned rescue antiemetics might decrease the effect size of complete control of acute vomiting ($p = 0.035$).
Conclusion	Acupuncture in addition to usual care may increase the complete control of chemotherapy-induced acute vomiting and delayed vomiting but the certainty of evidence was very low. Well-designed RCTs with larger sample sizes, standardized treatment regimens, and core outcome measures are needed.

1.1.6. Lian 2014 ☆☆

Lian WL, Pan MQ, Zhou DH, Zhang ZJ. Effectiveness of acupuncture for palliative care in cancer patients: a systematic review. Chin J Integr Med. 2014.20(2):136-47. [160304].

Objective	To critically evaluate the currently available randomized clinical trials regarding the effectiveness of acupuncture in palliative care for cancer patients, hence, to provide sufficient evidences for the widespread use of acupuncture in cancer treatment.
Methods	Two independent reviewers extracted data from all of the randomized clinical trials (RCTs) that assessed the efficacy of acupuncture in palliative care for cancer patients. Seven databases were searched from their respective inception to December 2010. All eligible trials identified were evaluated by two independent reviewers using the Jadad scale, and data from the articles were validated and extracted.
Results	In total, 33 RCTs met the inclusion criteria. The effects of acupuncture on different cancer-related aspects were shown, including **chemotherapy or radiotherapy-induced side effects (13/33**, 39.4%), cancer pain (6/33, 18.2%), post-operative urinary retention (4/33, 12.1%), quality of life (2/33, 6.1%), vasomotor syndrome (2/33, 6.1%), post-operative gastrointestinal dysfunction (2/33, 6.1%), prevention of prolonged postoperative ileus (2/33, 6.1%), joint symptoms (1/33, 3.0%), and immunomodulation (1/33, 3.0%).
Conclusions	The result of our systematic review suggested that the **effectiveness of acupuncture** in palliative care for cancer patients is promising, especially in **reducing chemotherapy or radiotherapy-induced side effects** and cancer pain. Acupuncture may be an appropriate adjunctive treatment for palliative care.

1.1.7. Mckeon 2013 ☆☆

Mckeon C, Smith CA, Hardy J, Chang E. Acupuncture and acupressure for chemotherapy-induced nausea and vomiting: a systematic review. Aust J Acupunct Chin Med. 2013. 8(1):2-27. [160092].

Background	Control of chemotherapy-induced nausea and vomiting (CINV) has improved with advances in antiemetics, such as NK1 antagonists. Despite these advances, patients still experience these symptoms, and expert panels encourage additional methods to reduce these symptoms.
Objectives	The objective was to assess the effectiveness of acupuncture and acupressure on acute and delayed CINV in cancer patients.
Methods	Search strategy: The following databases were searched: AMED, MEDLINE, CINAHL, PubMed, Cochrane Controlled Trials Registry, and Science Direct. The search was undertaken from the inception of the database to January 2012. Selection criteria: Randomised controlled trials and systematic reviews of acupoint stimulation by needles, electrical stimulation or acupressure (excluding laser, point injection and non-invasive electrostimulation) and assessing chemotherapy-induced nausea or vomiting, or both. Data collection and analysis: Data was provided by publications of original trials and pooled. Standardised mean differences with confidence incidences were calculated.
Main results	**Seven trials were pooled for acupuncture and six for acupressure**. Acupuncture reduced the frequency of acute vomiting (mean difference [MD] -7.40, 95% confidence interval [CI] -9.07 to -5.72), but did not reduce acute nausea severity or frequency compared to control. Delayed symptoms for acupuncture were not reported. Acupuncture showed a reduction in the dose of rescue medication (MD -5.52, 95% CI -7.45 to -3.58). Acupressure showed a decrease in frequency of nausea (MD -0.32, 95% CI -0.59 to 0.06) but not acute vomiting or delayed symptoms. All trials used state-of-the-art combination antiemetics, except for the early electroacupuncture trials.
Authors' conclusions	**Acupuncture has demonstrated some benefit for chemotherapy-induced acute vomiting** by reducing the frequency of vomiting and reducing the use of rescue medication, while acupressure has shown a decrease in the frequency of nausea. Further trials of acupuncture and acupressure for chemotherapy-induced nausea and vomiting in patients with refractory symptoms are needed before recommendations for clinical practice can be made. Future trials must be sufficiently powered, as this remains a major flaw with the majority of studies to date.

1.1.8. Garcia 2013 ☆

Garcia MK, Mcquade J, Haddad R, Patel S, Lee R, Yang P, Palmer JL, Cohen L. Systematic review of acupuncture in cancer care: a synthesis of the evidence. J Clin Oncol. 2013. 31(7):952-60. [157620].

Purpose	Many cancer centers offer acupuncture services. To date, a comprehensive systematic review of acupuncture in cancer care has not been conducted. The purpose of this review was to evaluate the efficacy of acupuncture for symptom management in patients with cancer.
Methods	Medline, Embase, CINAHL, Cochrane (all databases), Scopus, and PubMed were searched from inception through December 2011 for prospective randomized clinical trials (RCT) evaluating acupuncture for symptom management in cancer care. Only studies involving needle insertion into acupuncture points were included. No language limitations were applied. Studies were assessed for risk of bias (ROB) according to Cochrane criteria. Outcomes by symptom were designated as positive, negative, or unclear.

Results	A total of 2,151 publications were screened. Of those, 41 RCTs involving eight symptoms (pain, nausea, hot flashes, fatigue, radiation-induced xerostomia, prolonged postoperative ileus, anxiety/mood disorders, and sleep disturbance) met all inclusion criteria. One positive trial of acupuncture for chemotherapy-induced nausea and vomiting had low ROB. Of the remaining studies, eight had unclear ROB (four positive, three negative, and one with unclear outcomes). Thirty-three studies had high ROB (19 positive, 11 negative, and three with both positive and negative outcomes depending on the symptom).
Conclusion	**Acupuncture is an appropriate adjunctive treatment for chemotherapy-induced nausea/vomiting**, but additional studies are needed. For other symptoms, efficacy remains undetermined owing to high ROB among studies. Future research should focus on standardizing comparison groups and treatment methods, be at least single-blinded, assess biologic mechanisms, have adequate statistical power, and involve multiple acupuncturists.

1.1.9. Silva 2009 ☆☆

Silva, Dacirene Ribeiro França; Reis, Paula Elaine Diniz; Gomes, Isabelle Pimentel Gomes; Funghetto, Silvana Schwerz; Ponce de Leon, Casandra G. R. M. [Non Pharmacological Interventions for Chemotherapy Induced Nauseas and Vomits: integrative review]. Online Brazilian Journal of Nursing. 2009;8(1):. [99711].

Background	Nausea and vomiting are one of the most common gastrointestinal toxicities of antineoplastic treatment; it may affect negatively patient`s nutritional condition, hidroeletrolitic balance and quality of life.
Objective methods	This study aimed to identify evidences in medical literature regarding non-pharmacologic interventions to prevent and treat chemotherapy induced nausea and vomiting. We performed an integrative review on online databases for that purpose.
Results	We elected 9 articles from this research, which presented the following possible non-pharmacological interventions for chemotherapy emesis: **acupressure, acupuncture, electroacupuncture**, relaxing techniques and yoga.
Conclusions	The authors concluded that the results suggested that these interventions should be recommended for cancer patients, mainly those presenting chemotherapy emesis in consecutive cycles.

1.1.10. Ezzo 2006 ☆☆

Ezzo JM, Richardson MA, Vickers A, Allen C, Dibble SL, Issell BF, Lao L, Pearl M, Ramirez G, Roscoe J, Shen J, Shivnan JC, Streitberger K, Treish I, Zhang G. Acupuncture-point stimulation for chemotherapy-induced nausea or vomiting. Cochrane Database Syst Rev. 2006;(2):CD002285.141212

Purpose	The objective was to assess the effectiveness of acupuncture-point stimulation on acute and delayed chemotherapy-induced nausea and vomiting in cancer patients.

Methods	Search strategy : We searched MEDLINE, EMBASE, PsycLIT, MANTIS, Science Citation Index, CCTR (Cochrane Controlled Trials Registry), Cochrane Complementary Medicine Field Trials Register, Cochrane Pain, Palliative Care and Supportive Care Specialized Register, Cochrane Cancer Specialized Register, and conference abstracts. Selection criteria: randomized trials of acupuncture-point stimulation by any method (needles, electrical stimulation, magnets, or acupressure) and assessing chemotherapy-induced nausea or vomiting, or both. Data collection and analysis: Data were provided by investigators of the original trials and pooled using a xed effect model. Relative risks were calculated on dichotomous data. Standardized mean differences were calculated for nausea severity. Weighted mean differences were calculated for number of emetic episodes.
Results	**Eleven trials (N = 1247)** were pooled. Overall, **acupuncture-point stimulation of all methods combined reduced the incidence of acute vomiting** (RR = 0.82; 95% condence interval 0.69 to 0.99; P = 0.04), but not acute or delayed nausea severity compared to control. By modality, stimulation with needles reduced proportion of acute vomiting (RR = 0.74; 95% condence interval 0.58 to 0.94; P = 0.01),but not acute nausea severity. **Electroacupuncture reduced the proportion of acute vomiting** (RR = 0.76; 95% condence interval 0.60 to 0.97; P = 0.02), but manual acupuncture did not; delayed symptoms for acupuncture were not reported. **Acupressure reduced mean acute nausea severity** (SMD = -0.19; 95% condence interval -0.37 to -0.01; P = 0.04) but not acute vomiting or delayed symptoms. Noninvasive electrostimulation showed no benet for any outcome. All trials used concomitant pharmacologic antiemetics, and all, except electroacupuncture trials, used state-of-the-art antiemetics.
Conclusion	This review complements data on post-operative nausea and vomiting suggesting a biologic effect of acupuncture-point stimulation. Electroacupuncture has demonstrated benefit for chemotherapy-induced acute vomiting, but studies combining electroacupuncture with state-of-the-art antiemetics and in patients with refractory symptoms are needed to determine clinical relevance. Self-administered acupressure appears to have a protective effect for acute nausea and can readily be taught to patients though studies did not involve placebo control.

1.1.11. Ezzo 2005 ☆☆

Ezzo J, Vickers A, Richardson MA, Allen C, Dibble SL, Issell B, Lao L, Pearl M, Ramirez G, Roscoe Ja, Shen J, Shivnan J, Streitberger K, Treish I, Zhang G. Acupuncture-point stimulation for chemotherapy-induced nausea and vomiting. J Clin Oncol. 2005. 23(28):7188-98. [140957].

Purpose	Assess the effectiveness of acupuncture-point stimulation on acute and delayed chemotherapy-induced nausea and vomiting in cancer patients.
Materials and methods	Randomized trials of acupuncture-point stimulation by needles, electrical stimulation, magnets, or acupressure were retrieved. Data were provided by investigators of the original trials and pooled using a fixed-effects model.

Results	Eleven trials (N = 1,247) were pooled. Overall, acupuncture-point stimulation reduced the proportion of acute vomiting (relative risks [RR] = 0.82; 95% CI, 0.69 to 0.99; P = .04), but not the mean number of acute emetic episodes or acute or delayed nausea severity compared with controls. By modality, stimulation with needles reduced the proportion of acute vomiting (RR = 0.74; 95% CI, 0.58 to 0.94; P = .01), but not acute nausea severity. Electroacupuncture reduced the proportion of acute vomiting (RR = 0.76; 95% CI, 0.60 to 0.97; P = .02), but manual acupuncture did not; delayed symptoms were not reported. Acupressure reduced mean acute nausea severity (standardized mean difference = -0.19; 95% CI, -0.38 to -0.01; P = .03) and most severe acute nausea, but not acute vomiting or delayed symptoms. Noninvasive electrostimulation showed no benefit for any outcome. All trials used concomitant pharmacologic antiemetics, and all, except electroacupuncture trials, used state-of-the-art antiemetics.
Conclusion	This review complements data on postoperative nausea and vomiting, suggesting a biologic effect of acupuncture-point stimulation. Electroacupuncture has demonstrated benefit for chemotherapy-induced acute vomiting, but studies with state-of-the-art antiemetics as well as studies for refractory symptoms are needed to determine clinical relevance. Acupressure seems to reduce chemotherapy-induced acute nausea severity, though studies did not involve a placebo control. Noninvasive electrostimulation seems unlikely to have a clinically relevant impact when patients are given state-of-the-art pharmacologic antiemetic therapy.

1.2. Special Acupuncture Techniques

1.2.1. Comparison of Acupuncture techniques

1.2.1.1. Huang 2025

Huang AY, Liang J, Tian LY, Yang Y. Efficacy of integrative non-pharmacological traditional Chinese medicine approaches in enhancing gastrointestinal function and quality of life in patients undergoing chemotherapy: a systematic review and network meta-analysis. Discov Oncol. 2025 Aug 25;16(1):1610. https://doi.org/10.1007/s12672-025-03409-y

Backgound	The rising global incidence of cancer poses significant challenges for healthcare systems, necessitating the exploration of novel therapeutic strategies. This study involves a systematic review and network meta-analysis to evaluate the efficacy of non-pharmacological traditional Chinese medicine (TCM) interventions, such as acupuncture, electroacupuncture, and moxibustion, in improving gastrointestinal function and quality of life in patients undergoing chemotherapy.
Methods	A comprehensive search was conducted across multiple databases up to March 13, 2024, to identify randomized controlled trials (RCTs) that involved the comparison of non-pharmacological TCM interventions with standard pharmacological treatments in adult patients with cancer undergoing chemotherapy. Primary outcomes included the quality of life measured by the Karnofsky Performance Status scale, gastrointestinal function measured by complete response rates, and objective response rates. Data were analyzed using Bayesian network meta-analysis methods, with outcomes presented as odds ratios (OR) and mean differences (MD) along with 95% credible intervals (CrIs).

Results	A total of **37 RCTs involving 3268 participants** were included in the review. The findings highlighted the significant efficacy of specific TCM interventions. The top-ranked intervention for improving Karnofsky Performance Status scores was electroacupuncture at the Geshu point combined with medication, with a surface under the cumulative ranking curve (SUCRA) value of 80.3%. For complete response rates, a combination of acupuncture, auricular point sticking, and medication emerged as the most effective method, with a SUCRA value of 88.0%. Additionally, for enhancing objective response rates, the combination of moxibustion at the Zusanli point and medication was identified as the leading intervention, with a SUCRA value of 80.3%.
Conclusion	Non-pharmacological TCM interventions were effective in significantly improving gastrointestinal function and quality of life in patients undergoing chemotherapy, representing modalities that viably complement standard pharmacological treatments. Our findings support the integration of these TCM practices into oncology care, emphasizing the need for further high-quality research to establish comprehensive clinical guidelines. This integrative strategy aligns with the principles of patient-centered care, promoting a more holistic approach to cancer treatment.

1.2.2. Moxibustion

1.2.2.1. Yao 2022

Yao Z, Xu Z, Xu T, Liu X, Xu S, Wan C, Zhou X. Moxibustion for alleviating chemotherapy-induced gastrointestinal adverse effects: A systematic review of randomized controlled trials. Complement Ther Clin Pract. 2022 Feb;46:101527. https://doi.org/10.1016/j.ctcp.2021.101527

Objective	This systematic review aims to assess whether moxibustion is effective and safe for gastrointestinal adverse effects, a common and thorny issue arising from chemotherapy.
Methods	Seven electronic databases were searched up to August 28, 2021, to identify randomized controlled trials (RCTs) comparing moxibustion versus non-moxibustion treatments for various gastrointestinal adverse effects after chemotherapy. The Karnofsky performance status (KPS) and quality of life scores and the incidence of moxibustion-related adverse events were also investigated. Effects in meta-analyses were measured by risk ratios (RRs) or mean differences (MDs).
Results	**Thirty-two RCTs (n = 2990)** were included. Compared to the controls, moxibustion significantly reduced the incidences of nausea/vomiting (RR 0.70, 95% CI 0.61-0.79), severe nausea/vomiting (RR 0.39, 95% CI 0.29-0.51), diarrhoea (RR 0.56, 95% CI 0.38-0.82), constipation (RR 0.59, 95% CI 0.44-0.78), and abdominal distension (RR 0.60, 95% CI 0.46-0.78). The KPS (MD 7.53, 95% CI 3.42-11.64) and quality of life (MD 8.88, 95% CI 0.96-16.80) scores were also significantly improved after moxibustion. The results did not support a benefit of moxibustion on inappetence (RR 0.69, 95% CI 0.40-1.22) or abdominal pain (RR 0.60, 95% CI 0.28-1.30). All adverse events related to moxibustion were mild.
Conclusions	Moderate-to very-low-quality evidence suggests that moxibustion may be safely used as an adjuvant treatment after chemotherapy to reduce the incidences of nausea and vomiting, diarrhoea, constipation, and abdominal distension and improve the performance status and quality of life in patients with malignant tumours. Its effects on abdominal pain and inappetence are uncertain.

1.2.2.2. Zhang 2018

Zhang HW, Lin ZX, Cheung F, Cho WC, Tang JL. Moxibustion for alleviating side effects of

chemotherapy or radiotherapy in people with cancer. Cochrane Database Syst Rev. 2018:112p. [196416]. doi

Background	Moxibustion, a common treatment in traditional Chinese medicine, involves burning herbal preparations containing Artemisia vulgaris on or above the skin at acupuncture points. Its intended effect is to enhance body function, and it could reduce the side effects of chemotherapy or radiotherapy and improve quality of life (QoL) in people with cancer.
Objectives	To assess the effects of moxibustion for alleviating side effects associated with chemotherapy, radiotherapy or both in people with cancer.
Methods	SEARCH METHODS: We searched the Cochrane Central Register of Controlled Trials (CENTRAL) in the Cochrane Library, MEDLINE via Ovid, Embase via Ovid and AMED (Allied and Complementary Medicine Database) from their inception to February 2018. We also searched databases in China including the Chinese BioMedical Literature Database (CBM), Chinese Medical Current Contents (CMCC), TCMonline, Chinese Dissertation Database (CDDB), China Medical Academic Conference (CMAC) and Index to Chinese Periodical Literature from inception to August 2017. Registries for clinical trials and other resources were also searched. SELECTION CRITERIA: We included randomised controlled trials (RCTs) comparing moxibustion treatment, including moxa cone and moxa stick, versus sham, no treatment or conventional treatment. DATA COLLECTION AND ANALYSIS: Two review authors (HWZ and FC) independently extracted data on study design, participants, treatment and control intervention, and outcome measures, and they also assessed risk of bias in the included studies. We performed meta-analyses, expressing dichotomous outcomes as risk ratios (RR) and continuous outcomes as mean differences (MD), with 95% confidence intervals (CI).

Main results	We included 29 RCTs involving 2569 participants. Five RCTs compared moxibustion versus no treatment, 15 compared moxibustion plus conventional treatment versus conventional treatment, one compared moxibustion versus sham moxibustion, and eight compared moxibustion versus conventional medicine. The overall risk of bias was high in 18 studies and unclear in 11 studies. Studies measured outcomes in various ways, and we could rarely pool data. Moxibustion versus no treatment: low-certainty evidence from single small studies suggested that moxibustion was associated with higher white blood cell counts (MD 1.77 × 109/L; 95% CI 0.76 to 2.78; 80 participants, low-certainty evidence) and higher serum haemoglobin concentrations (MD 1.33 g/L; 95% CI 0.59 to 2.07; 66 participants, low-certainty evidence) in people with cancer, during or after chemotherapy/radiotherapy, compared with no treatment. There was no evidence of an effect on leukopenia (RR 0.50, 95% CI 0.10 to 2.56; 72 participants, low-certainty evidence) between study groups. The effects on immune function (CD3, CD4, and CD8 counts) were inconsistent. Moxibustion versus sham moxibustion: low-certainty evidence from one study (50 participants) suggested that moxibustion improved QoL (measured as the score on the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-C30 (EORTC QLQ-C30)) compared with sham treatment (MD 14.88 points; 95% CI 4.83 to 24.93). Low-certainty evidence from this study also showed reductions in symptom scores for nausea and vomiting (MD -38.57 points, 95% CI -48.67 to -28.47) and diarrhoea (MD -13.81, 95% CI -27.52 to -0.10), and higher mean white blood cell count (MD 1.72 × 109/L, 95% CI 0.97 to 2.47), serum haemoglobin (MD 2.06 g/L, 95% CI 1.26 to 2.86) and platelets (MD 210.79 × 109/L, 95% CI 167.02 to 254.56) when compared with sham moxibustion. Moxibustion versus conventional medicines: low-certainty evidence from one study (90 participants) suggested that moxibustion improved WBC count eight days after treatment ended compared with conventional medicines (MD 0.40 × 109/L; 95% CI 0.15 to 0.65). Low-certainty evidence from two studies (235 participants) suggested moxibustion improved serum haemoglobin concentrations compared with conventional medicines (MD 10.28 g/L; 95% CI 4.51 to 16.05).Moxibustion plus conventional treatment versus conventional treatment alone: low-certainty evidence showed that moxibustion plus conventional treatment was associated with lower incidence and severity of leukopenia (WHO grade 3 to 4) (RR 0.14, 95% CI 0.01 to 2.64; 1 study, 56 participants), higher QoL scores on the EORTC QLQ-C30 (MD 8.85 points, 95% CI 4.25 to 13.46; 3 studies, 134 participants, I^2 = 26%), lower symptom scores for nausea and vomiting (RR 0.43, 95% CI 0.25 to 0.74; 7 studies, 801participants; I^2 = 19%), higher white blood cell counts (data not pooled due to heterogeneity), higher serum haemoglobin (MD 3.97 g/L, 95% CI 1.40 to 6.53; 2 studies, 142 participants, I^2 = 0%). There was no difference in platelet counts between the two groups (MD 13.48 × 109/L; 95% CI -16.00 to 42.95; 2 studies, 142 participants; I^2 = 34%).Most included studies did not report related adverse events, such as burning or allergic reactions.
Authors' conclusions	Limited, low-certainty evidence suggests that moxibustion treatment may help to reduce the haematological and gastrointestinal toxicities of chemotherapy or radiotherapy, improving QoL in people with cancer; however, the evidence is not conclusive, and we cannot rule out benefits or risks with this treatment. High-quality studies that report adverse effects are needed.

1.2.2.3. Huang 2017 Ø

Huang Z, Qin Z, Yao Q, Wang Y, Liu Z. Moxibustion for Chemotherapy-Induced Nausea and Vomiting: A Systematic Review and Meta-Analysis. Evid Based Complement Alternat Med. 2017. [49920].

Background	Nausea and vomiting are distressing symptoms for patients receiving chemotherapy. Moxibustion, which involves the use of burning moxa to generate heat and stimulate acupoints, has been reported to potentially ameliorate chemotherapy-induced side effects, particularly nausea and vomiting.
Objectives	This systematic review evaluated current evidence on the effectiveness of moxibustion against chemotherapy-induced nausea and vomiting (CINV).
Methods	We searched eight online databases and two trial registries for relevant trials. The random-effects model was used to conduct a meta-analysis. Furthermore, the risk ratio (RR) and mean difference (MD) were used to explain dichotomous and continuous outcomes, respectively; the outcomes were within 95% confidence intervals (Cis).
Results	The results revealed that moxibustion might more favorably relieve the severity and frequency of CINV, compared with no treatment (RR: 2.04, 95% CI: 1.42-2.93); moxibustion might have stronger effects than antiemetic drugs (RR: 1.87, 95% CI: 1.27-2.76). There is no robust result that moxibustion could enhance the effects of antiemetic drugs administered as a complementary treatment. Actual moxibustion (8.10 ± 10.98) may have more favorable effects than placebo moxibustion (46.67 ± 23.32).
Conclusions	However, the evidence obtained is not sufficient because of the lack of strict clinical trials.

1.2.3. Acupression

1.2.3.1. Lee 2008 ☆

Lee J, Dodd M, Dibble S, Abrams D. Review of acupressure studies for chemotherapy-induced nausea and vomiting control. J Pain Symptom Manage. 2008. 36(5):529-44. [159369].

Objective	The purpose of this review was to evaluate the effects of a noninvasive intervention, acupressure, when combined with antiemetics for the control of chemotherapy-induced nausea and vomiting (CINV).
methods – results	Ten controlled acupressure studies were included in this review. The review evaluated one quasi-experimental and nine randomized clinical trials, which included two specific acupressure modalities, that is, acupressure band and finger acupressure. The effects of the acupressure modalities were compared study by study. Four of seven acupressure band trials supported the positive effects of acupressure, whereas three acupressure band trials yielded negative results regarding the possible effects of acupressure; however, all the studies with negative results had methodological issues. In contrast, one quasi-experimental and two randomized finger acupressure trials all supported the positive effects of acupressure on CINV control. The reported effects of the two acupressure modalities in each phase of CINV produced variable results. Acupressure bands were effective in controlling acute nausea, whereas finger acupressure controlled delayed nausea and vomiting. The overall effect of acupressure was strongly suggestive but not conclusive. Differences in the acupressure modality, the emetic potential of chemotherapeutic agents, antiemetic use, and sample characteristics of each study made study-to-study comparisons difficult. Suggestive effects of acupressure, cost-effectiveness, and the noninvasiveness of the interventions encourage researchers to further investigate the efficacy of this modality.
Conclusions	Acupressure should be strongly recommended as an effective, nonpharmacologic adjuvant intervention for CINV control if its positive effects are reproduced in future acupressure clinical trials.

1.2.3.2. Klein 2004 ☆

Klein J, Griffiths P. Acupressure for nausea and vomiting in cancer patients receiving chemotherapy, British Journal of Community Nursing. 2004. 9(9):383-88. [159378].

Background	Practitioners working with patients undergoing chemotherapy regularly encourage them to use acupressure in the form of Sea Bands™ for the relief of treatment related nausea and vomiting. This mini-review sets out to uncover and examine the evidence base for this recommendation.
Objective	A mini systematic review was carried out to identify randomized controlled trials comparing the use of acupressure plus usual care with usual care alone. The population was adult patients receiving cancer chemotherapy. The outcome was nausea or vomiting duration or intensity.
Methods	Searches on Medline, Embase, AMED, the Cochrane Library, Cancerlit and Cinahl identified two randomized controlled trials involving 482 patients which compared acupressure to no intervention control.
Results / conclusion	The results suggest that acupressure may decrease nausea among patients undergoing chemotherapy but further work is required before conclusively advising patients on the efficacy of acupressure in preventing and treating chemotherapy induced nausea.

1.2.4. Acupoint injection

1.2.4.1. Ai 2024

Ai M, Cai Y, Zeng Y, Xiong D. Efficacy of acupoint injection of metoclopramide for post-chemotherapy vomiting: A systematic review and meta-analysis. Medicine (Baltimore). 2024 Apr 5;103(14):e37569. https://doi.org/10.1097/MD.0000000000037569

Backgound	Vomiting is one of the most common adverse events of chemotherapy. The purpose of this study was to systematically review the clinical efficacy of acupoint injection of metoclopramide in the treatment of post-chemotherapy vomiting.
Methods	We searched 4 general English databases and 4 conventional Chinese databases, all with a time frame from database creation to December 2022. The retrieved clinical trials of acupoint injection of metoclopramide for post-chemotherapy vomiting were then subjected to meta-analysis and trial sequential analysis.
Results	A total of **12 studies** were included, with a total sample size of **965 cases**. Meta-analysis showed that acupoint injection of metoclopramide was effective in improving anti-vomiting effective rate [odds ratio = 5.67, 95% confidence interval = (3.80,8.47), P < .00001] compared with intramuscular/intravenous injection, and trial sequential analysis showed that this benefit was conclusive. Subgroup analysis demonstrated that acupoint injection significantly improved the anti-vomiting effective rate at doses of 10 mg qd, 20 mg qd, and 30 mg qd, as well as at durations of 1 day and 5 days. Subgroup analysis also indicated that injection at the Zusanli acupoint significantly increased the anti-vomiting effective rate, while injection at the Neiguan acupoint had an anti-vomiting effective rate comparable to that of the control group. Harbord regression showed no significant publication bias (P = .730).
Conclusion	Acupoint injection of metoclopramide for post-chemotherapy vomiting is more effective than intramuscular and intravenous injections and is not limited by dose or duration of treatment, which may be the preferred way of administration.

1.3. Special Clinical Forms

1.3.1. Children

1.3.1.1. Ho 2024

Ho KY, Lam KKW, Xia W, Liu Q, Chiu SY, Chan GCF, Li WHC. Systematic Review of the Effectiveness of Complementary and Alternative Medicine on Nausea and Vomiting in Children With Cancer. Cancer Nurs. 2025 Mar-Apr 01;48(2):89-98. https://doi.org/10.1097/NCC.0000000000001239

Backgound	Nausea and vomiting are distressing symptoms reported by pediatric oncology patients during cancer treatment. More than 40% of them experience these symptoms even after receiving antiemetics.
Objective	Given the limitations of pharmacological interventions, this systematic review synthesized the evidence for the effectiveness of complementary and alternative medicine in controlling nausea and vomiting among pediatric oncology patients.
Methods	Ten databases were searched to identify relevant randomized controlled trials. The risk of bias of selected studies was graded using the Cochrane risk-of-bias tool for randomized trials. The primary outcomes were nausea and vomiting. The secondary outcomes were intervention adherence and number of adverse events.
Results	Nineteen papers met the inclusion criteria and were included in the review. Sixteen studies showed high risk of bias. The tested interventions were acupuncture, acupressure, aromatherapy, hypnosis, massage, active cognitive distraction/relaxation techniques, creative arts therapy, psychoeducation, and combined massage and **acupressure**. **Acupuncture**, hypnosis, and massage interventions improved nausea and vomiting. Fifteen trials reported intervention adherence; only 7 monitored adverse events. The most common reason for dropout was refusal from patients and/or their guardians. A total of 34 adverse events were noted.
Conclusions	There is insufficient evidence that complementary and alternative medicine is effective, feasible, or safe in controlling nausea and vomiting among pediatric oncology patients due to high risk of bias.
Implications for practice	**Acupuncture**, hypnosis, and massage appear to have therapeutic benefits. However, more robust studies are needed to address the identified methodological issues and determine the real value of these 3 interventions.

1.3.1.2. Mora 2022

Mora DC, Overvåg G, Jong MC, Kristoffersen AE, Stavleu DC, Liu J, Stub T. Complementary and alternative medicine modalities used to treat adverse effects of anti-cancer treatment among children and young adults: a systematic review and meta-analysis of randomized controlled trials. BMC Complement Med Ther. 2022 Apr 2;22(1):97. https://doi.org/10.1186/s12906-022-03537-w

Background	Dealing with the symptom burden of cancer diagnosis and treatment has led parents to seek different self-management strategies including Alternative and Complementary Medicine (CAM). The aim of this study was to perform a systematic review and meta-analysis about the use and effect of CAM modalities to treat adverse effects of conventional cancer treatment among children and young adults.

Methods	Six scientific research databases were used to identify randomized controlled trials (RCTs) from 1990 to September 2020. Included studies investigated the use of CAM to treat cancer treatment related adverse effects in children and young adults compared to controls.
Results	Twenty RCTs comprising 1,069 participants were included in this review. The included studies investigated acupuncture, mind-body therapies, supplements, and vitamins for chemotherapy-induced nausea and vomiting (CINV), oral mucositis, and anxiety among children and young adults who underwent conventional cancer treatment. Seven studies (315 participants) were included in the meta-analysis. The overall effect of CAM (including acupuncture and hypnosis only) on chemotherapy-induced nausea and/or vomiting and controls was statistically significant with a standard mean difference of -0.54, 95% CI [-0.77, -0.31] I2 = 0% ($p < 0.00001$). There was a significant difference between **acupuncture** and controls (n = 5) for intensity and/or episodes of CINV with an SMD -0.59, 95% CI [-0.85, -0.33] ($p < 0.00001$). No significant difference was found between hypnosis and controls (n = 2) for severity or episodes of CINV with an SMD -0.41, 95% CI [-1.09, 0.27] I2 = 41% ($p = 0.19$).
Conclusion	Current evidence from this meta-analysis of randomized controlled trials shows that CAM, including **acupuncture** and hypnosis only, is effective in reducing chemotherapy-induced nausea and vomiting in children and young adults. More rigorous trials and long-term effects should be investigated if acupuncture and hypnosis are to be recommended for clinical use.

1.3.1.3. Momani 2017 ~

Momani TG, Berry DL. Integrative Therapeutic Approaches for the Management and Control of Nausea in Children Undergoing Cancer Treatment: A Systematic Review of Literature. J Pediatr Oncol Nurs. 2017;:173-184. [194926].

Objectives	Chemotherapy-induced nausea and vomiting (CINV) continues to be a common symptom experienced by children undergoing cancer treatment despite the use of contemporary antiemetics. Integrative therapeutic approaches in addition to standard pharmacologic antiemetic regimes offer potential to control CINV. The purpose of this review was to identify current evidence on integrative therapeutic approaches for the control of CINV in children with cancer.
Methods	Online search engines (PubMed, CINAHL, PsychINFO) were queried using MESH terms. Titles, abstracts, and then full-text articles were reviewed for relevance to the review.
Results	The search resulted in 53 studies. Twenty-one studies met our review criteria. Integrative therapies identified included acupuncture/acupressure, aromatherapy, herbal supplements, hypnosis, and other cognitive behavioral interventions. Our review identified little information on the effectiveness and safety of most integrative therapeutic approaches for the control and management of CINV in children with cancer.
Conclusions	However, evidence from adult cancer studies and some pediatric studies identify promising interventions for further testing.

1.4. Methodological quality

1.4.1. Penati 2025

Penati R, Vecchio R, Gatto R, Odone A, Deandrea S. High Outcome-Reporting Bias in Randomized-Controlled Trials of Acupuncture for Cancer Chemotherapy-Induced Nausea and Vomiting: A

Systematic Review and Meta-Epidemiological Study. Curr Oncol. 2025 Aug 15;32(8):462. https://doi.org/10.3390/curroncol32080462

Background	Selective outcome-reporting bias refers to the selective reporting of a subset of study findings. This methodological limitation may occur in cancer-related acupuncture studies, where valid empirical studies on psychometric performance are still lacking.
Methods	We assessed the risk of selective outcome reporting bias in studies published in English that were included in a systematic review on acupuncture for preventing cancer chemotherapy-induced nausea and vomiting. For each study, we searched for registry availability and, if present, assessed its validity. We described each study outcome (nausea, vomiting, or both) according to the following seven items: type of outcome, domain, specific measurement, specific metric, type of data, methods of aggregation, and timepoint unit and time.
Results	**Eleven studies** published between 1987 and 2019 in English were evaluated. Only four (36%) had a registry, of which only two were prospective and therefore considered valid. Discrepancies were found in the specific measurement of the outcome in two studies and in the specific metric. In many other cases, discrepancies were not evaluable due to missing information. No study reported complete outcomes as planned in the published protocol.
Conclusion	Communication about the importance of prospective trial registration, including outcome details, should be enforced to reduce the risk of selective outcome reporting bias in oncology acupuncture studies.

2. Clinical Practice Guidelines

⊕ positive recommendation (regardless of the level of evidence reported) Ø negative recommendation (or lack of evidence)

2.1. 6th and 7th International consensus guidelines for the management of advanced breast cancer 2023 ⊕

Cardoso F, Paluch-Shimon S, Schumacher-Wulf E, Matos L, Gelmon K, Aapro MS, Bajpai J, Barrios CH, Bergh J, Bergsten-Nordström E, Biganzoli L, Cardoso MJ, Carey LA, Mac Gregor MC, Chidebe R, Cortés J, Curigliano G, Dent RA, El Saghir NS, Eniu A, Fallowfield L, Francis PA, Franco Millan SX, Gilchrist J, Gligorov J, Gradishar WJ, Haidinger R, Harbeck N, Hu X, Kaur R, Kiely B, Kim SB, Koppikar S, Kuper-Hommel MJJ, Lecouvet FE, Mason G, Mertz SA, Mueller V, Myerson C, Neciosup S, Offersen BV, Ohno S, Pagani O, Partridge AH, Penault-Llorca F, Prat A, Rugo HS, Senkus E, Sledge GW, Swain SM, Thomssen C, Vorobiof DA, Vuylsteke P, Wiseman T, Xu B, Costa A, Norton L, Winer EP. 6th and 7th International consensus guidelines for the management of advanced breast cancer (ABC guidelines 6 and 7). Breast. 2024 May 28;76:103756. https://doi.org/10.1016/j.breast.2024.103756

Acupuncture may help against chemotherapy-induced nausea and vomiting, fatigue and hot flushes. (Level of Evidence 1/ b; Consensus 100%)

2.2. Multinational Association of Supportive Care in Cancer and the European Society for Medical Oncology (MASCC, ESMO) 2023 ⊕

Acupuncture and electroacupuncture.The use of acupuncture or electroacupuncture, where appropriate and as an adjunct to standard antiemetics, is suggested for the management of CINV, particularly acute vomiting. Any effects may be short-lived [II, B]. *Acupressure and auricular acupressure.* No recommendation can be made for the use of acupressure or auricular acupressure due to conflicting evidence, while the use of non-invasive electrical stimulation is not recommended [III, C].

2.3. National Cancer Comprehensive Network (NCCN, USA) 2022 ⊕

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) Antiemesis Version 2.2022 — March 23, 2022. https://www.nccn.org/professionals/physician_gls/pdf/antiemesis.pdf

Anticipatory nausea/vomiting : Acupuncture/acupressure.

2.4. Sociedad Española de Oncología Médica (SEOM, Spain) 2022 ⊕

Majem M, de Las Peñas R, Virizuela JA, Cabezón-Gutiérrez L, Cruz P, Lopez-Castro R, Méndez M, Mondéjar R, Muñoz MDM, Escobar Y. SEOM clinical guideline emesis (2021). Clin Transl Oncol. 2022 Mar 26. https://doi.org/10.1007/s12094-022-02802-1

Other therapies such as acupuncture have been shown to be efective in controlling anticipatory emesis (Evidence level II; Recommendation grade B).

2.5. Association of the Scientific Medical Societies, German Cancer Society, German Cancer Aid, (AWMF, DKG, DK, Germany) 2021 ⊕

S3-Leitlinie Komplementärmedizin in der Behandlung von onkologischen PatientInnen. September 2021. https://www.leitlinienprogramm-onkologie.de/leitlinien/komplementaermedizin/

11.3.1.12. *Nausea and vomiting*. **Acupressure**. Recommendation strength: Can. Patient context: Oncological patients. Note: (Chemo- or radiotherapy induced). **Acupuncture**. Recommendation strength: Can. Patient context: Patients with platinum-based chemotherapy. Note: In addition to antiemetic therapy (chemotherapy induced).

2.6. American Society of Clinical Oncology (ASCO, USA) 2020 Ø

Hesketh PJ, Kris MG, Basch E, Bohlke K, Barbour SY, Clark-Snow RA, Danso MA, Dennis K, Dupuis LL, Dusetzina SB, Eng C, Feyer PC, Jordan K, Noonan K, Sparacio D, Lyman GH. Antiemetics: ASCO Guideline Update J Clin Oncol.. 2020;38(24):2782-2797. [211193]. doi

Evidence remains insufficient for a recommendation for or against the use of ginger, acupuncture/acupressure, and other complementary or alternative therapies for the prevention of nausea and vomiting in patients with cancer.

2.7. National Cancer Comprehensive Network (NCCN, USA) 2020 ⊕

NCCN. Clinical Practice Guidelines in Oncology (NCCN guidelines for patient): Guidelines for Supportive Care : Antiemesis. Version 1.2021. National Cancer Comprehensive Network. 2020;:71P. doi

Anticipatory nausea/vomiting : acupuncture/acupressure.

2.8. Arbeitsgemeinschaft Gynäkologische Onkologie (AGO, Allemagne) 2018 ⊕

Diagnosis and Treatment of Patients with Primary and Metastatic Breast Cancer. Complementary Therapy Survivorship. Arbeitsgemeinschaft Gynäkologische Onkologie (AGO). 2018;:35P. [182073].

(Electro)-Acupuncture as adjunct to entiemetic treatment in case of Chemotherapy-induced nausea and vomiting. Level of evidence : 1b (individual RCT), grade of evidence (B), AGO recommendation grade (+) This examination or therapeutic intervention is for the patient of limited benefit and can be performed.

2.9. National Cancer Comprehensive Network (NCCN, USA) 2018 ⊕

NCCN Guidelines for Supportive Care : antiemesis. National Cancer Comprehensive Network. 2018;:68P. [188079].

Anticipatory nausea/vomiting : acupuncture/acupressure.

2.10. American Cancer Society / American Society of Clinical Oncology (ASCO, USA) 2018 ⊕

Lyman GH, Greenlee H, Bohlke K, Bao T, DeMichele AM, Deng GE, Fouladbakhsh JM, Gil B, Hershman DL, Mansfield S, Mussallem DM, Mustian KM, Price E, Rafte S, Cohen L. Integrative Therapies During and After Breast Cancer Treatment: ASCO Endorsement of the SIO Clinical Practice Guideline. J Clin Oncol. 2018;Jun 11. [155475].

Chemotherapy-induced nausea and vomiting Recommendations: Acupressure can be considered as an addition to antiemetics drugs to control nausea and vomiting during chemotherapy (Strength of evidence : B). Electroacupuncture can be considered as an addition to antiemetics drugs to control vomiting during chemotherapy (Strength of evidence : B)

2.11. European School of Oncology (ESO) and the European Society for Medical Oncology (ESMO) 2018 ⊕

Cardoso F, Senkus E, Costa A, Papadopoulos E, Aapro M, André F et al. 4th ESO-ESMO International Consensus Guidelines for Advanced Breast Cancer (ABC 4)†. Ann Oncol. 2018;29(8):1634-57. [196973].

Acupuncture may help against **induced nausea and vomiting**, fatigue and hot flashes;

2.12. Aetna (insurance provider, USA) 2018 ⊕

Acupuncture. Aetna (insurance provider, USA). 2018. 73P. [188029].

Aetna considers needle acupuncture (manual or electroacupuncture) medically necessary for any of the following indications:**chemotherapy-induced nausea and vomiting**

2.13. Alberta Health Services 2017 (AHS, Canada) ⊕

Chemotherapy Induced Nausea and Vomiting, Pediatric – Inpatient, Provincial Clinical Knowledge Topic. Alberta Health Services. 2017. 42p. [173086].

Consider using breakthrough CINV interventions : Acupressure or acupuncture.

2.14. American Society of Clinical Oncology (ASCO, USA) 2017 Ø

Hesketh PJ, Kris MG, Basch E, Bohlke K, Barbour SY, Clark-Snow RA, Danso MA, Dennis K, Dupuis LL, Dusetzina SB, Eng C, Feyer PC, Jordan K, Noonan K, Sparacio D, Somerfield MR, Lyman GH. Antiemetics: American Society of Clinical Oncology clinical practice guideline update. J Clin Oncol. 2017;35(28):3240-61. [197509].

Complementary and alternative therapies: (Reworded for clarity) Evidence remains insufficient for a recommendation for or against the use of ginger, **acupuncture/acupressure**, and other complementary or alternative therapies for the prevention of nausea and vomiting in patients with cancer.

2.15. Association Francophone des Soins Oncologiques de Support (AFSOS, France) 2017 ⊕

Association Francophone des Soins Oncologiques de Support (AFSOS). Fiches Réferentiels ; Prise en charge des vomissements chimio-induits (MAJ 2017). [196582].

NVCI. Solutions non-médicamenteuses: acupuncture. En complément d'une prophylaxie médicamenteuse bien conduite (grade B de recommandation)

2.16. British Columbia Cancer Agency (BCCA, Canada) 2017 ⊕

Palliative Care for the Patient with Incurable Cancer or Advanced Disease Part 2: Pain and Symptom Management . Clinical Practice Guidelines and Protocols in British Columbia. 2017:47P. [197157].

Nausea and Vomiting: Non-pharmacological: modifications to diet (e.g., small bland meals) and environment (e.g., control smells and noise), relaxation and good oral hygiene, and **acupressure** (for chemotherapy-induced acute nausea, but not for delayed.

2.17. Society for Integrative Oncology (SIO, USA) 2017 ⊕

Greenlee H, DuPont-Reyes MJ, Balneaves LG et al. Clinical practice guidelines on the evidence-based use of integrative therapies during and after breast cancer treatment. CA Cancer J Clin. 2017 May 6;67(3):194-232. [158977].

Chemotherapy-Induced Nausea and Vomiting : Acupressure can be considered as an addition to anti-emetics drugs to control nausea and vomiting during CT.(Strength of evidence : B) Acupuncture can be considered as an addition to anti-emetics drugs to control vomiting during CT.(Strength of evidence : B)

2.18. Emblemhealth (insurance provider, USA) 2017 ⊕

Acupuncture — Medicare Dual-Eligible Members Emblemhealth. 2017. [111547].

Members with the Medicare Dual-Eligible benefit are eligible for acupuncture when performed by an individual licensed by New York State to perform acupuncture and when performed for the following diagnoses: 1. Adult postoperative nausea and vomiting 2. **Chemotherapy related nausea and vomiting** 3. Pregnancy related nausea and vomiting 4. Carpal tunnel syndrome 5. Epicondylitis (tennis elbow) 6. Headache 7. Low back pain 8. Menstrual pain 9. Myofascial pain 10. Osteoarthritis

2.19. Ministry of Health (MOH, Malaysia) 2017 ⊕

Traditional and Complementary Medicine Practice Guideline on Acupuncture. Traditional and Complementary Medicine (T&CM) Division, Ministry of Health (MOH). Kuala Lumpur, Malaysia. 2017. 41p. [180540].

Acupuncture services offered at the T&CM Units of public healthcare facilities are indicated for: a) Post stroke management; b) Chronic pain management; and c) **Chemotherapy-induced nausea and vomiting**.

2.20. Society for Integrative Oncology (SIO, USA) 2014 ⊕

Greenlee H, Balneaves LG, Carlson LE, Cohen M, Deng G, Hershman D, Mumber M, Perlmutter J, Seely D, Sen A, Zick SM, Tripathy D; Society for Integrative Oncology. Clinical practice guidelines on the use of integrative therapies as supportive care in patients treated for breast cancer. J Natl Cancer Inst Monogr. 2014;50:346-58. [167074].

CINV. Recommendations: Acupressure can be considered for BC patients receiving CT as an addition to antiemetics to help control nausea and vomiting during CT. Electroacupuncture can be considered for BC patients as an addition to antiemetics to control vomiting during CT Strength of evidence: B

2.21. Association Francophone des Soins Oncologiques de Support (AFSOS) 2014 ⊕

Association Francophone des Soins Oncologiques de Support (AFSOS). Fiches Réferentiels : L'acupuncture en onco-hématologie MAJ 2014 (online)

Nausées et vomissements chimio-induits (N/V). L'acupuncture est indiquée en complément des traitements conventionnels dans la prise en charge des N/V induits par la chimiothérapie, en particulier les N/V aigus. Peu de données évaluent l'acupuncture dans les N/VN retardés. Les traitements conventionnels utilises et décrits dans la littérature ne font pas référence aux traitements de dernière génération (anti NK1 type aprepitant) (Niveau de preuve HAS : A)

2.22. European Partnership for Action Against Cancer (EPAA, Europe) 2014 ⊕

Complementary and alternative medicine (CAM) in cancer care. Development and opportunities of Integrative Oncology. European Partnership for Action Against Cancer (EPAAC). 2014;:339P. [186081].

As to the use of acupuncture and TCM in the treatment of symptoms correlated to anti-cancer therapy, the literature has demonstrated a good level of evidence in the following cases: **nausea and vomiting**, pain, hotflashes and xerostomia, taking also in account the absence of relevant adverse effects and interactions.

2.23. American College of Chest Physicians (ACCP, USA) 2013 ⊕

Deng GE, Rausch SM, JoneS LW, Gulati A, Kumar NB, GreenleE H, Pietanza MC, Cassileth BR. Complementary therapies and integrative medicine in lung cancer: diagnosis and management of lung cancer, 3rd ed: American College Of Chest Physicians Evidence-Based Clinical Practice Guidelines. Chest. 2013;143(5 Suppl):420-36. [159371].

Recommendation 2.5.3.1. In patients having nausea and vomiting from either chemotherapy or radiation therapy, acupuncture or related techniques is suggested as an adjunct treatment option (Grade 2B).

2.24. U.S. Navy Bureau of Medicine and Surgery (USA) 2013 ⊕

Acupuncture. U.S. Navy Bureau of Medicine and Surgery. 2013.17p. [180539].

Category A (fair to high quality evidence): Authorized and recommended for routine use. **Chemotherapy induced nausea/vomiting** .

2.25. Pediatric Oncology Group of Ontario (POGO, Canada) 2012 ⊕

Dupuis LL, Boodhan S, Holdsworth M, Robinson PD, Hain R, Portwine C, O'Shaughnessy E, Sung L. Guideline for the prevention of acute nausea and vomiting due to antineoplastic medication in pediatric cancer patients. Toronto (ON): Pediatric Oncology Group of Ontario (POGO); 2012. 199 p. [155232].

What adjunctive non-pharmacological interventions provide control of acute AINV in children receiving antineoplastic agents of any emetic risk? Recommendation: We suggest that acupuncture, acupressure, guided imagery, music therapy, progressive muscle relaxation and psycho-educational support and information may be effective in children receiving antineoplastic agents. Virtual reality may convey benefit. (Weak recommendation Very low quality evidence)

2.26. American Society of Clinical Oncology (ASCO, USA) 2011 Ø

Basch E, Prestrud AA, Hesketh PJ, et al. Antiemetics: American Society of Clinical Oncology clinical practice guideline update. J Clin Oncol. 2011;29(31):4189-98. [157361]

Recommendation 7. No published randomized controlled trial data that met inclusion criteria are currently available to support a recommendation about such therapies [complementary and alternative medicine therapies].
A Cochrane Systematic Review of acupuncture-point stimulation for CINV was published [Ezzo 2006]. However, this effort did not meet prespecified inclusion and exclusion criteria for this systematic review.

2.27. American College of Chest Physicians (ACCP, USA) 2007 ⊕

Cassileth BR, Deng GE, Gomez JE, Johnstone PA, Kumar N, Vickers AJ; American College of Chest Physicians. Complementary therapies and integrative oncology in lung cancer: Accp Evidence-Based Clinical Practice Guidelines (2nd Edition). Chest. 2007;132(3sup:340s-54s. [146961]

Recommendation 8. Acupuncture is recommended as a complementary therapy when nausea and vomiting associated with chemotherapy are poorly controlled. Grade of recommendation, 1B
Recommendation 9. Electrostimulation wristbands are not recommended for managing chemotherapy-induced nausea and vomiting. Grade of recommendation, 1B

2.28. National Institute for Health and Clinical Excellence (NICE, UK) 2004 ⊕

Guidance on Cancer Services Improving Supportive and Palliative Care for Adults with Cancer. National Institute for Health and Clinical Excellence - Clinical Guidelines. 2004:209P. [197445].

There have been three systematic reviews of randomised controlled trials and studies of other complementary therapies, not limited exclusively to patients with cancer. Two provide some evidence of the benefits of aromatherapy in reducing anxiety [A] and acupuncture in reducing nausea and vomiting [A]. Preliminary results of a systematic review 152 11 of chemotherapy-related nausea and vomiting is also positive for acupuncture14 [A]. There is some indication that therapies might have the ability to improve patients' general sense of well-being and quality of life through, for instance, reductions in distress, anxiety, pain and nausea [B].

3. Randomized Controlled Trials

3.1. Sources

Tous les ECR listés sont répertoriés dans la base de données Acudoc2. Les citations des ECR dans les revues systématiques et recommandations de bonne pratique sont rapportées dans le tableau ci-dessous. La mention **Acudoc2** indique que l'ECR n'est pas cité, actuellement, par une revue systématique ou recommandation de bonne pratique.

Revues systématiques

1. **Lian 2014**: Lian WL, Pan MQ, Zhou DH, Zhang ZJ. Effectiveness of acupuncture for palliative care in cancer patients: a systematic review. Chin J Integr Med. 2014.20(2):136-47
2. **Mvkeon 2013**: Mckeon C, Smith CA, Hardy J, Chang E. Acupuncture and acupressure for chemotherapy-induced nausea and vomiting: a systematic review. Aust J Acupunct Chin Med. 2013. 8(1):2-27. [160092].
3. **Garcia 2013**: Garcia MK, Mcquade J, Haddad R, Patel S, Lee R, Yang P, Palmer JL, Cohen L. Systematic review of acupuncture in cancer care: a synthesis of the evidence. J Clin Oncol. 2013. 31(7):952-60.
4. **Silva 2009** : Silva, Dacirene Ribeiro França; Reis, Paula Elaine Diniz; Gomes, Isabelle Pimentel Gomes; Funghetto, Silvana Schwerz; Ponce de Leon, Casandra G. R. M. [Non Pharmacological Interventions for Chemotherapy Induced Nauseas and Vomits: integrative review]. Online Brazilian Journal of Nursing. 2009;8(1).
5. **Ezzo 2006:** Ezzo JM, Richardson MA, Vickers A, Allen C, Dibble SL, Issell BF, Lao L, Pearl M, Ramirez G, Roscoe J, Shen J, Shivnan JC, Streitberger K, Treish I, Zhang G. Acupuncture-point stimulation for chemotherapy-induced nausea or vomiting. Cochrane Database Syst Rev. 2006;(2):CD002285.141212
6. **Klein 2004:** Klein J, Griffiths P. Acupressure for nausea and vomiting in cancer patients receiving chemotherapy, British Journal of Community Nursing. 2004. 9(9):383-88. [159378].

Recommandations de bonne pratique

1. **ASCO 2018:** Lyman GH, Greenlee H, Bohlke K, Bao T et al. Integrative Therapies During and After Breast Cancer Treatment: ASCO Endorsement of the SIO Clinical Practice Guideline. J Clin Oncol. 2018 Jun 11:JCO2018792721. doi: 10.1200/JCO.2018.79.2721.
2. **ASCO 2017:** Hesketh PJ, Kris MG, Basch E, Bohlke K, Barbour SY, Clark-Snow RA, Danso MA, Dennis K, Dupuis LL, Dusetzina SB, Eng C, Feyer PC, Jordan K, Noonan K, Sparacio D, Somerfield MR, Lyman GH. Antiemetics: American Society of Clinical Oncology Clinical Practice Guideline Update. J Clin Oncol. 2017;35(28):3240-61. [187938].
3. **SIO 2014:** Greenlee H, Balneaves LG, Carlson LE, Cohen M, Deng G, Hershman D, Mumber M, Perlmutter J, Seely D, Sen A, Zick SM, Tripathy D; Society for Integrative Oncology. Clinical practice guidelines on the use of integrative therapies as supportive care in patients treated for breast cancer. J Natl Cancer Inst Monogr. 2014;50:346-58. [167074].
4. **ACCP 2013:** Deng GE, Rausch SM, JoneS LW, Gulati A, Kumar NB, GreenleE H, Pietanza MC, Cassileth BR. Complementary therapies and integrative medicine in lung cancer: diagnosis and management of lung cancer, 3rd ed: American College Of Chest Physicians Evidence-Based Clinical Practice Guidelines. Chest. 2013;143(5 Suppl):420-36. [159371].
5. **ACCP 2007:** Cassileth BR, Deng GE, Gomez JE, Johnstone PA, Kumar N, Vickers AJ; American College of Chest Physicians. Complementary therapies and integrative oncology in lung cancer: Accp Evidence-Based Clinical Practice Guidelines (2nd Edition). Chest. 2007;132(3sup:340s-54s. [146961]

3.2. List

Année	Références	Sources
2017	Feng Xiumei. [Clinical effect of acupuncture combined with acupoint massage on gastrointestinal reaction after chemotherapy in patients with breast cancer]. Journal of Modern Oncology. 2017;18:2922-5. [195857].	Acudoc2
	Pu Zhong-Jian, Ma Xiao-Ping, Wang Ya-Jun, Sun Yuan-Peng. [Clinical Study on Different Acupuncture and Moxibustion Methods for Prevention and Treatment of Nausea and Vomiting Caused by Chemotherapy]. Chinese Journal of Information on Traditional Chinese Medicine. 2017;3:34-7. [195902].	Acudoc2
	Xie J, Chen LH, Ning ZY, Zhang CY, Chen H, Chen Z, Meng ZQ, Zhu XY. Effect of transcutaneous electrical acupoint stimulation combined with palonosetron on chemotherapy-induced nausea and vomiting: a single-blind, randomized, controlled trial. Chin J Cancer. 2017;36(1):6. [166182]	Acudoc2
2016	Avc HS, Ovayolu N, Ovayolu Ö. Effect of Acupressure on Nausea-Vomiting in Patients With Acute Myeloblastic Leukemia. Holist Nurs Pract. 2016;30(5):257-62. [187817].	Acudoc2

Année	Références	Sources
	Eghbali M, Yekaninejad MS, Varaei S, Jalalinia SF Samimi MA, Sa'atchi K. The effect of auricular acupressure on nausea and vomiting caused by chemotherapy among breast cancer patients. Complement Ther Clin Pract. 2016;:189-94. [188511].	Acudoc2
	Hu Cuilian, Chen Chunyan, Wei Shuli. [The result detection of decreasing tumor chemotherapy by ear beans pressure and tsusanli acupuncture point acupoint injection]. Chinese Journal of Ethnomedicine and Ethnopharmacy. 2016;3:78-9. [52045].	Acudoc2
	Liu Hong , Xu Tian-shu. [Clinical Study on Moxibustion Treatment for Nausea and Vomiting Induced by Cisplatin Clemotherapy] Journal of Clinical Acupuncture and Moxibustion. 2016;32(11):4. [188600].	Acudoc2
	Xie Anwei, Niu Meie, Chan Yuying, Xu Yueye, Hu Shaoyan, Lin Xiaoxia. [Effect observation for Acupuncture therapy for chemotherapy-induced gastrointestinal reaction in children with acute leukemia]. Journal of Nurses Training. 2016;6:488-91. [195876]	Acudoc2
	Xu Yin, Cheng Yongbo, Liu Li’ning, Yang Zhijun, An Junli, Handan Mingren Hospital. [Clinical Observation of Prevention for Gastrointestinal Symptoms Caused by Chemotherapy(Cisplatin) with Old Ten-Needles]. Chinese Archives of Traditional Chinese Medicine. 2016;2:359-61. [52068].	Acudoc2
2015	¤Chen Yan. [Observation on the clinical effect of mine fire moxibustion on the prevention of chemotherapy induced vomiting]. Dazhong Keji. 2015;8:99-101. [195933].	Acudoc2
	Lai Milin, Liu Dan. [An Observation on Effect of Bo's Abdominal Acupuncture on Nausea and Vomiting after Chemotherapy for Breast Cancer]. Journal of Mathematical Medicine. 2015;9:1295-6. [52017]	Acudoc2
	Liang Xiaoning. [Prevention efficacy watch of Xiexin ginger decoction combined with acupuncture and vomiting after chemotherapy]. Dazhong Keji. 2015;6:97-8. [52067].	Acudoc2
	Liu Jun, Xiao Yang, Guo Jianxiong, Liu Yangchen, Wei Wei, Zhou Juan. [Clinical trial of electronic antiemetic acupuncture in combination with palonosetron in prevention of tardive vomiting induced by highly emetogenic chemotherapy]. Chongqing Medical Journal. 2015;8:1087-90. [52106].	Acudoc2
	Liu YQ, Sun S, Dong HJ, Zhai DX1, Zhang DY, Shen W, Bai LL, Yu J, Zhou LH, Yu CQ. Wrist-ankle acupuncture and ginger moxibustion for preventing gastrointestinal reactions to chemotherapy: A randomized controlled trial. Chin J Integr Med. 2015;21(9):697-702. [186899]	Acudoc2
	Mckeon C, Smith Ca, Gibbons K, Hardy J. EA versus sham acupuncture and no acupuncture for the control of acute and delayed chemotherapy-induced nausea and vomiting: a pilot study. Acupunct Med. 2015;33(4):277-83. [185627].	Acudoc2
	Rithirangsriroj K, Manchana T, Akkayagorn L. Efficacy of acupuncture in prevention of delayed chemotherapy induced nausea and vomiting in gynecologic cancer patients. Gynecol Oncol. 2015;136(1):82-6. [178355].	ASCO 2017
	Shen Y, Liu L, Chiang Js, Meng Z, Garcia Mk, Chen Z, Peng H, Bei W, Zhao Q, Spelman AR, Cohen L. randomized, placebo-controlled trial of K1 acupoint acustimulation to prevent cisplatin-induced or oxaliplatin-induced nausea. Cancer. 2015;121(1):84-92. [178360].	Acudoc2
	Tang Yanqing, Ma Hongmei, Wan Yonghui, Chen Sanmei, Renmin Hospital of Wuhan University. [Clinical observation of electronic antiemetic acupuncture combined with tropisetron in the prevention of vomiting induced by cisplatin chemotherapy]. Journal of Modern Oncology. 2015;17:2491-4. [52218].	Acudoc2

Année	Références	Sources
2014	Molassiotis A, Russell W, Hughes J, Breckons M, Lloyd-Williams M, Richardson J, Hulme C, Brearley SG, Campbell M, Garrow A, Ryder WD. The effectiveness of acupressure for the control and management of chemotherapy-related acute and delayed nausea: a randomized controlled trial. J Pain Symptom Manage. 2014;47(1):12-25. [42611].	ASCO 2017
	Wang Li-Na, Hu Hong-Yan, Qiu Yi-Ling, et al. Acupoint sticking at shenque (CV 8) with ginger-prepared ban xia (rhizoma pinelliae) for nausea and vomiting induced by amifostine. Journal of Acupuncture and Tuina Science. 2014;12(4):221. [187074].	Acudoc2
2013	Genç A, Can G, Aydiner A. The efficiency of the acupressure in prevention of the chemotherapy-induced nausea and vomiting. Support Care Cancer. 2013;21(1):253-61. [42617].	ASCO 2017
	Xing Jin-Yun, Li Xue, Ren Xiu-Mei. [Therapeutic observation of abdominal acupuncture in preventing nausea and vomiting caused by cisplatin-based chemotherapy]. Shanghai Journal of Acupuncture and Moxibustion. 2013;32(12):1046. [178935].	Acudoc2
2012	Beith JM, Oh B, Chatfield MD, et al. Electroacupuncture for nausea, vomiting, and myelosuppression in women receiving adjuvant chemotherapy for early breast cancer: a randomized controlled pilot trial. Medical Acupuncture. 2012;24():241-8. [48548].	SIO 2014
	Enblom A, Johnsson A, Hammar M, Onelöv E, Steineck G, Börjeson S. Acupuncture compared with placebo acupuncture in radiotherapy-induced nausea, a randomized controlled study. Annals of Oncology. 2012;23(5):1353-61. [160110].	ASCO 2017 - Garcia 2013 - ACCP 2013
	Yeh CH, Chien LC, Chiang YC, Lin SW, Huang CK, Ren D. Reduction in nausea and vomiting in children undergoing cancer chemotherapy by either appropriate or sham auricular acupuncture points with standard care. J Altern Complement Med. 2012;18(4):334-40. [160068].	Acudoc2
2009	Sima L, Wang X. [Therapeutic effect of acupuncture on cisplatin-induced nausea and vomiting]. Zhongguo Zhen Jiu. 2009;29(1):3-6. [152395].	ACCP 2013
	Yang Y, Zhang Y, Jing NC, et al. Electroacupuncture at Zusanli (ST 36) for treatment of nausea and vomiting caused by the chemotherapy of the malignant tumor: a multicentral randomized controlled trial [in Chinese]. Zhongguo Zhen Jiu. 2009;29(12):955-958 [154625]. Traduction anglaise International Journal of Clinical Acupuncture. 2010;2:53-59. [162878].	Lian 2014 - ACCP 2013 - Garcia 2013 -
	You Q, Yu H, Wu D, Zhang Y, Zheng J, Peng C. Vitamin B6 points pc6 injection during acupuncture can relieve nausea and vomiting in patients with ovarian cancer. Int J Gynecol Cancer. 2009;19(4):567-71. [153307].	ACCP 2013
2008	Gottschling S, Reindl TK, Meyer S, Berrang J, Henze G, Graeber S, Ong MF, Graf N. Acupuncture to alleviate chemotherapy-induced nausea and vomiting in pediatric oncology - a randomized multicenter crossover pilot trial. Klin Padiatr. 2008;220(6):365-70. [152496].	ACCP 2013 - Garcia 2013 - Mckeon 2013
	Jones E, Isom S, Kemper KJ, Mclean TW. Acupressure for chemotherapy-associated nausea and vomiting in children. J Soc Integr Oncol. 2008;6(4):141-5. [159475].	Mckeon 2013 -
	Huang Zhifen, Shi Zhiyan, Li Hanzhong, Tan Zhiqiang. [Clinical observation on acupuncture at Neiguan and Zusanli for prevention and treatment of gastrointestinal reactions induced by Cisplatin and other chemotherapy]. Liaoning Journal of TCM. 2008;35(6):917-9. [195813].	Lian 2014

Année	Références	Sources
2007	Dibble SL, Luce J, Cooper BA, Israel J, Cohen M, Nussey B, Rugo H. Acupressure for chemotherapy-induced nausea and vomiting: a randomized clinical trial. Oncol Nurs Forum. 2007;34(4):813-20. [147054].	SIO 2014 - Mckeon 2013 - Lee 2008
	Molassiotis A, Helin AM, Dabbour R, Hummerston S. The Effects of P6 acupressure in the prophylaxis of chemotherapy-related nausea and vomiting in breast cancer patients. Complementary Therapies in Medicine. 2007;15(1):3-12. [145588].	SIO 2014 - Mckeon 2013 - Silva 2009 - Lee 2008
2006	Fu J, Meng Zq, Chen Z, Peng Ht, Liu Lm. [Clinical observation on electric stimulation of yongquan (Ki 1) for prevention of nausea and vomiting induced by cisplatin]. Chinese Acupuncture AND Moxibustion. 2006;26(4):250-2. [125817].	Lian 2014
	Melchart D, Ihbe-Heffinger A, Leps B, von Schilling C, Linde K. Acupuncture and acupressure for the prevention of chemotherapy-induced nausea–a randomised cross-over pilot study. Support Care Cancer. 2006;14(8):878–82. [141161]	Garcia 2013 - Silva 2009 - Lee 2008
	Reindl TK, Geilen W, Hartmann R, Wiebelitz KR, Kan G, Wilhelm I, Lugauer S, Behrens C, Weiberlenn T, Hasan C, Gottschling S, Wild-Bergner T, Henze G, Driever PH. Acupuncture against chemotherapy-induced nausea and vomiting in pediatric oncology interim results of a multicenter crossover study. Support Care Cancer. 2006;14(2):172-6. [140635].	Mckeon 2013
	Roscoe JA, Jean-Pierre P, Morrow GR, et al. Exploratory analysis of the usefulness of acupressure bands when severe chemotherapy-related nausea is expected. J Soc Integr Oncol 2006;4(1):16-20. [160029].	Lee 2008
	Zhang Qing, Wang Xiaomin, Hu Fengshan, Zhao Wenshuo. [Clinical observation on acupuncture at specific acupoints for prevention and treatment of cancer patients with vomiting induced by chemotherapy]. Journal of Traditional Chinese Medicine. 2006;47(3):209-10. [195812].	Lian 2014
2005	Roscoe JA, Matteson SE, Morrow GR, HickokJT, Bushunow P, Griggs J, Gazi R, Smith B, Kramer Z, Smith J. Acustimulation wrist bands are not effective for the control of chemotherapy-induced nausea in women with breast cancer. J Pain Symptom Manage. 2005;29(4):376-84. [136594].	Silva 2009
2004	Chen Chuang, Zhang Zuojun, Li Hanzhong, Tan Zhiqiang, Lu Yongkui, Huang Zhifen. [Clinical cbservation on electro-acupuncture at Zusanli for reduction of toxicity caused by chemotherapy]. New Journal of Traditional Chinese Medicine. 2004;36(3):46-7. [195829].	Lian 2014
	Shi Q. [Clinical observation on efficacy of acupuncture at Zusanli, Neiguan in prevention of chemotherapy-induced gastrointestinal reactions]. Clinical Journal of Chinese Medicine. 2004;16:481. [195831]	Lian 2014
2003	Roscoe JA, Morrow GR, Hickok JT, Bushunow P, Pierce HI, Flynn PJ, Kirshner JJ, Moore DF, Atkins JN. The Efficacy of acupressure and acustimulation wrist bands for the relief of chemotherapy-induced nausea and vomiting, J Pain Symptom Manage. 2003;26(2):731-42. [160043].	Mckeon 2013 - Lee 2008 - ACCP 2007 - Ezzo 2006 - Klein 2004

Année	Références	Sources
	Streitberger K, Friedrich-Rust M, Bardenheuer H. Effect of acupuncture compared with placebo-acupuncture at p6 as additional antiemetic prophylaxis in high-dose chemotherapy and autologous peripheral blood stem cell transplantation: a randomized co. Clin Cancer Res. 2003;9(7):2538-44.. [117403].	Lian 2014 - Mckeon 2013 - Garcia 2013 - ACCP 2007 - Ezzo 2006
	Treish I, Shord S, Valgus J, et al. Randomized double-blind study of the Reliefband as an adjunct to standard antiemetics in patients receiving moderately high to highly emetogenic chemotherapy. Sup- portive Cancer Care 2003;8:515{21. [160189]	Ezzo 2006
2002	Noga S, Tolman A, Roman J, et al. Acupressure as an adjunct to pharmacologic control of nausea, vomiting and retching (N/V) during blood and marrow transplantation (BMT): a randomized, placebocontrolled, algorithm based study. Proceedings of the American Society of Clinical Oncology. 2002; Vol. 21:361a. [48574].	Lee 2008 - Ezzo 2006
	Roscoe J, Morrow G, Bushunow P, et al. Acustimulation wristbands for the relief of chemotherapy-induced nausea. Alternative Therapies in Health and Medicine 2002;8(4):56-63. [19107].	Ezzo 2006
2001	Meyer CD. Efficacy of acupressure treatment at neiguan point with acupressure bands for chemotherapy- induced nausea, vomiting, and retching. Pittsburgh, PA : School of Nursing, Duquesne University. 2001. [51985]..	Lee 2008
2000	Dibble SL, Chapman J, Mack KA, Shih AS. Acupressure for nausea: results of a pilot study. Oncol Nurs Forum. 2000;27(1):41-7. [71663].	Lian 2014 - SIO 2014 - Mckeon 2013 - Garcia 2013 - Lee 2008 - Ezzo 2006 - Klein 2004
	Shen J, Wenger N, Glaspy J, Hays RD, Albert PS, Choi C, Shekelle PG. Electroacupuncture for control of myeloablative chemotherapy-induced emesis. a randomized controlled trial. JAMA. 2000;284(21):2755-61. [77145].	SIO 2014 - Mckeon 2013 - Silva 2009 - ACCP 2007 - Ezzo 2006
	Xia Yue-Shan et al. Acupuncture plus ear-points press in preventing vomiting induced by chemotherapy with cisplatin. International Journal of Clinical Acupuncture. 2000;11(2):145-8. [72185]	Acudoc2
	Melchart D, Ihbe-Heffinger A, Leps B, Von Schilling C, Linde K. Acupuncture and acupressure for the prevention of chemotherapy-induced nausea-a randomised cross-over pilot study. Support Care Cancer. 2006;14(8):878-82. [141161].	Acudoc2
1999	Pearl M, Fischer M, McCauley D, et al. Transcutaneous electrical nerve stimulation as an adjunct for controlling chemotherapy-induced nausea and vomiting in gynecologic oncology patients. Cancer Nursing 1999;22(4):307-11. [101056].	Ezzo 2006
1998	Li Hua et al. Clinical study on acupuncture treatment of side reactions of radiotherapy and chemotherapy for malignant tumor. World Journal of Acupuncture-Moxibustion. 1998;8(2):8-12. [68449].	Lian 2014
	Lo L. Effect of acupressure on acute and delayed nausea and vomiting in children receiving chemotherapy [thesis] School of Nursing Case Western Reserve University, Cleveland, OH, 1998. [5789].	Lee 2008

Année	Références	Sources
1992	Price H, Williams CJ, Sergiou K. A randomized trial of acupressure for chemotherapy induced emesis. Proceedings of ASCO [abstr 1394], San Diego, CA, 1992. [5796].	Lee 2008
1991	McMillan C, Dundee J. The role of transcutaneous electrical stimulation of neiguan anti-emetic acupuncture point in controlling sickness after cancer chemotherapy. Physiotherapy 1991;77:499{502. [50615].	Ezzo 2006
	Price H, Lewith G, Williams C. Acupressure as an antiemetic in cancer chemotherapy. Complementary Medical Research. 1991;5(2):93-4. [29384]	Acudoc2
1988	Dundee JW, Ghaly RG, Fitzpatrick KT. Randomized comparison of the anti-emetic effects of Metoclopramide and electro acupuncture in cancer chemotherapy. British Journal of Clinical Pharmacology. 1988;25:678-9. [85022].	Mckeon 2013 - Garcia 2013 - Ezzo 2006
1987	Dundee JW, Ghaly RG, Fitzpatrick KT, Lynch GA, Abram WP. Acupuncture to prevent cisplatin-associated vomiting. Lancet. 1987;1(8541): [38868].	Mckeon 2013 - Garcia 2013 - Ezzo 2006
1986	Xia Yuqing et al. An approach to the effect on tumors of acupuncture in combination with radiotherapy or chemotherapy. Journal of TCM. 1986;6(1):23-6. [15116].	Lian 2014 - Garcia 2013