Table 1: Systematic reviews of acupuncture and related techniques for cancer-related fatigue (CrF)

Source: CAM-Cancer Collaboration. Acupuncture. Acupuncture | CAM Cancer, May 2026.

- Network Meta-analysis:
  Chou 2026; Tian 2023; Yao 2026;
- SRs:
  Choi 2022; He 2022; Voigtlander 2026
- Acupressure: Hsieh 2021
- Moxibustion: Bae 2024

Network meta-analysis

Review characteristics	Population, intervention, control, outcomes (PICO) of included studies	Results and conclusions	Assessment
Chou H-C, Konara Mudiyanselage SP, Tang C-C, Chen S-C, Fang S-Y, Lin M-F. Comparative effectiveness of acupoint stimulation therapies for cancer-related fatigue: A network meta-analysis. Worldviews Evid Based Nurs. 2026;23:e70104. doi:10.1111/wvn.70104			
Type of review Systematic review **Search strategy** ***Databases*** MEDLINE, CINAHL, Embase, Cochrane Library, Web of Science, Airiti Library ***Dates*** From inception until 24th November 2024 **Data synthesis** Network meta-analysis **Risk of bias /quality assessment** Cochrane risk-of-bias tool RoB2	**Studies and participants** Adults with cancer-related fatigue (CRF), undergoing or post-treatment. 28 RCTs, 2,370 participants **Interventions** Acupuncture (ACU) (12 RCTs) Acupressure (ACP) (11 RCTs) Moxibustion (Moxi) (multiple RCTs represented; at least 4 identified from table) Oil acupressure (Oil) (1 RCT explicitly). Transcutaneous electrical acupoint stimulation (TEAS) (1 RCT) Relaxing acupressure (RA) (1 RCT) **Controls** Usual care (UC) (31 control arms) Sham interventions (multiple sham-controlled RCTs across acupuncture, acupressure, moxibustion) Active acupoint therapies compared head-to-head (ACU vs ACP, ACP vs Oil, ACU vs Moxi, etc.) **Outcome measures and measurement tools** Change in CrF BFI / BFI-C; FACIT-F / FACT-F; MFI;	**Results for risk of bias assessment of primary studies included in review** 4 RCTs of high, 11 of some concerns and 13 at low risk of bias.* **GRADE** Not assessed. **Results for outcome measures** ***Acupoint stimulation as add-on treatment for fatigue*** Oil acupressure showed the strongest overall effect and ranked highest.** Followed closely by relaxing acupressure, acupuncture, and TEAS. Standard acupressure showed a more moderate benefit. Sham interventions produced only minimal improvement. Moxibustion appeared least effective. *Oil acupressure vs Usual Care*: SMD= −0.97 95% CI (−1.65, −0.30) SUCRA highest; strong effectiveness. *Relaxing acupressure (RA) vs Usual Care:* SMD= −0.92, 95% CI (−1.32, −0.52) Second-ranked intervention. *Acupuncture (ACU) vs Usual Care:* SMD= −0.89, 95% CI (−1.09, −0.68) Strong consistent effect.	**Quality assessment of the SR** Moderate quality according to AMSTAR 2 checklist. The interpretation of findings did not fully discuss the impact of risk of bias. **ROB-NM** Low–Moderate risk. Transparent methodological reporting, good network diagnostics (but uneven network), use of CINeMA, strong consistency. Clinical heterogeneity (transitivity), moderate RoB in included trials. **Comments** * The challenges of blinding associated with acupuncture were not considered as none of the RCTs was judged at high risk of bias for measurement of the outcome (i.e. blinding of patients, practitioners and assessors), contrary to other SRs. Similar optimistic assessment of other RoB domains (e.g. selection of reported results, **Oil acupressure was reported to have the highest SUCRA ranking with strongest overall effect. However, oil acupressure was assessed in

	RPFS / PFS; TFRS; VAS-F / VAS; MFSI-SF; MDASI; FS-C . **Measure of treatment effect** SMD with 95% CI. SUCRA used to rank interventions.	*TEAS vs Usual Care:* SMD= −0.89, 95% CI (−1.35, −0.43) Significant improvement. *Acupressure (ACP) vs Usual Care:* SMD= −0.75, 95% CI (−0.95, −0.55) Moderate effect. *Sham vs Usual Care:* SMD= −0.39, 95% CI (−0.58, −0.18) Minimal improvement. *Moxibustion (Moxi) vs Usual Care:* SMD= −0.20, 95% CI (−0.62, 0.20) Lower effectiveness. ***Compared with sham controls*** Relaxing acupressure and TEAS demonstrated clear benefits. Non-significant effects were reported for oil acupressure, acupuncture and standard acupressure. Moxibustion showed only borderline effects. Relaxing acupressure (RA) vs Sham: SMD= −0.69, 95% CI (−0.97, −0.41). Clear significant effect. TEAS vs Sham: SMD= −0.51, 95% CI (−0.97, −0.05) Statistically significant. ***Subgroup analyses*** Practitioner type, cancer type and stage. Consistent effectiveness across cancer types, particularly breast and lung cancer, and treatment stages **Adverse Events** The authors did not report anything regarding adverse events. ***Conclusions:*** *"Acupuncture, acupressure, and transcutaneous electrical acupoint stimulation emerged as effective interventions, with acupuncture demonstrating the highest efficacy. … Despite these promising results, methodological limitations, including variability in intervention protocols, limited representation of certain therapies, and risks of bias, necessitate cautious interpretation."*	only one small RCT (n=57) and only 17 participants received it. There was high variability in the intervention protocols. Some interventions had a limited number of studies.

Tian, H., Chen, Y., Sun, M., Huang, L., Xu, G., Yang, C., Luo, Q., Zhao, L., Wei, Z., & Liang, F. (2023). Acupuncture therapies for cancer-related fatigue: A Bayesian network meta-analysis and systematic review. Frontiers in Oncology, 13, 1071326. https://doi.org/10.3389/fonc.2023.1071326

Type of review
Systematic review, with pairwise and Bayesian network meta-analysis

Search strategy
Databases
PubMed, Embase, Web of Science, Cochrane Library, China Biology Medicine CD–NIC, China Science and Technology Journal Database, WanFang Database

Dates
From database inception to November 2022 (last manual search in June 2022)

Data synthesis
Meta-analysis.

Risk of bias /quality assessment
Cochrane Risk of Bias 2.0 (RoB 2) tool

Inclusion criteria
Population
Adults (≥18 years) with any type of cancer experiencing cancer-related fatigue

Interventions or exposures
Manual acupuncture, electroacupuncture, point application, acupressure, TEAS, Tai Chi, Qigong, yoga, massage, nutritional/dietary supplements)

Comparators or controls
Usual care, no intervention, sham, or any other intervention

Outcome
Cancer-related fatigue as primary endpoint measured by validated instruments

Studies and participants
34 RCTs, 2632 participants

Interventions
Point application (PA), Manual acupuncture (MA), MA + PA
Electroacupuncture, Acupressure, TEAS.

Controls
Usual care (UC), sham acupuncture (SA), waitlist (WL).

Outcome measures and measurement tools
CrF
Primary: CFS
Secondary: PSQI and other fatigue scales when CFS unavailable

Measure of treatment effect
SMD with 95% CI.

Results for risk of bias assessment of primary studies included in review
17/34 RCTs were rated as having a high risk of bias. Major concerns included inadequate blinding and lack of prospectively developed analysis plans, which could have led to selective reporting of results. 2 RCTs were rated as having 'some concerns' regarding risk of bias, 15 RCTs were rated as low risk. One study had a critical risk in the measurement of the outcome due to inappropriate outcome assessment.

GRADE quality was low to critically low for fatigue and sleep.

Results for outcome measures
Fatigue — Network Metaanalysis
Point application + usual care had the highest probability of improving CFS (SMD = −1.33,
95% CI = −2.02, −0.63)
Followed by manual acupuncture + point application (SMD = −1.21, 95% CI = −2.05, −0.38)
and manual acupuncture and usual care (SMD = −0.80, 95% CI = −1.50, −0.09).

PA + UC vs SA SMD = −1.46, 95% CI (−2.59, −0.33)
MA + PA vs SA SMD = −1.35, 95% CI (−2.56, −0.13)
PA + UC vs WL SMD = −1.67, 95% CI (−2.82, −0.51)
MA + PA vs WL SMD = −1.55, 95% CI (−2.80, −0.31)
AU vs WL SMD = −0.82, 95% CI (−1.52, −0.11)
MA vs WL SMD = −0.67, 95% CI (−1.33, −0.01)

Subgroup analyses
Not feasible due to the insufficient number of studies included.

Conclusion
"*This Bayesian network meta-analysis demonstrated that acupuncture was an effective and safe strategy for alleviating cancer-related fatigue. However, due to the undesirable heterogeneity and quality of the included RCTs, the results should be interpreted with caution. Further studies are warranted by incorporating more large-scale and high-quality RCTs.*"

Quality assessment of the SR
AMSTAR2 critically low-low; does not adequately account for risk of bias when interpreting results and does not handle RoB in synthesis.
Despite high/unclear RoB in many RCTs, the authors draw positive conclusions about effectiveness with only minimal caution.
Publication bias was not fully assessed.

RoB-NMA
RoB NMA assessment indicated concerns regarding the transitivity assessment (not framed), network geometry due to several sparse nodes, high heterogeneity not explored, limited sensitivity analyses, and the low certainty of the evidence.

Comment
All the included studies had issues with a lack of blinding. Most of the studies included had some concerns or were classified as a high risk of bias. Regarding the analysis there was no adjustment for different variables and concerns with the statistical synthesis- no inconsistency checks; unclear handling of multi-arm trials;

Yao Z, Ren Y, Liu L, Li S, Yan J. Efficacy and safety of acupuncture-related interventions for fatigue, quality of life, and cancer-related indicators in cancer patients: A systematic review and network meta-analysis. Complement Med Res. 2026. doi:10.1159/000549482

Type of review
Systematic review with network metaanalysis.

Search strategy
Databases
PubMed, Embase, Web of Science, Cochrane Library, EBSCO, CNKI, VIP, WanFang

From inception until 24th September 2024

Data synthesis
Pairwise and network meta-analysis,
SUCRA rating for NMA
GRADE assessment

Risk of bias /quality assessment
Cochrane risk-of-bias tool RoB [article states RoB2 but actual tool used is RoB original version]

Studies and participants
Patients with pathologically or molecularly confirmed cancer experiencing cancer-related fatigue, no restrictions on cancer type, stage, or nationality
30 RCTs, 2,287 participants (798 included in meta-analysis).

Interventions
Acupuncture, moxibustion, warm needle moxibustion, infrared laser moxibustion, electroacupuncture, acupressure.

Controls
Usual care (routine care), herbal (Chinese medicine), sham intervention, no treatment.

Outcome measures and measurement tools
Severity of CrF measured with PFSI, BFI, CES, MFI, TFRS, ISI (when related to fatigue manifestations).

Measure of treatment effect
SMD with 95% CI.

Results for risk of bias assessment of primary studies included in review *
High performance bias in 6/30 RCTs, unclear in 15; high detection bias in 4 and unclear in 15.
15 studies had an unclear risk for other biases.
Mostly low of selection, attrition and reporting bias,

GRADE described as "high quality" evidence by authors.**

Results for outcome measures

Cancer-related fatigue **-** Significant improvements
Moxibustion vs Usual Care: SMD = –2.54, 95% CI (–3.49, –1.59), $p < 0.00019$
Acupuncture vs Usual Care SMD = –0.60, 95% CI (–0.89, –0.30), $p < 0.00013$
Acupressure vs Usual Care: SMD = –0.54, 95% CI (–0.94, –0.14), $p = 0.0082$
Infrared Laser Moxibustion vs Herbal Medicine SMD = –1.71, 95% CI (–2.30, –1.11), $p < 0.00011$ Acupressure vs Sham SMD = –1.71, 95% CI (–2.30, –1.11), $p < 0.0001$
Overall pooled effect SMD = –1.54, 95% CI (–1.99, –1.10), $p < 0.00001$

CrF – improvements not significant
Warm Acupuncture vs Usual Care: SMD = –1.49, 95% CI (–3.77, 0.79), $p = 0.202$

Ranking (SUCRA): moxibustion may be the best acupuncture modality for improving CRF and quality of life.***

Adverse Events
Three of the RCTs reported mild Aes associated with warm acupuncture.

Conclusions
"Different acupuncture modalities improved cancer survivors' fatigue, quality of life, and cancer-related indices. Specifically, moxibustion exhibited great potential in enhancing CRF (cancer-related fatigue), quality of life, and increasing CD3+ and CD4+ cells."

Quality assessment of the SR
Low-moderate quality according to AMSTAR 2 checklist. RoB reported but not incorporated in the interpretation of findings.

ROB-NMA moderate to high risk of bias at network level, due to RoB of individual RCTs (performance and detection bias); network geometry moderate imbalance, transitivity (high clinical heterogeneity, only partly explained), indirect evidence (SUCRA rankings rely on sparse comparisons for some interventions), publication bias.

Comments
*RoB: discrepancy between tool stated (RoB2) and used (RoB2).
**GRADE: described as "high quality" but overestimates certainty, allegedly found no limitations to RCTs despite reported RoB and high heterogeneity (I^2 >90%).
*** Authors split moxibustion into sub-modalities (e.g., infrared laser moxibustion; warm needle moxibustion) and includes warm acupuncture as its own node; these nodes can rank very high even when study counts are small. → SUCRA ranking unstable
Transitivity questionable due to heterogeneous populations (cancer types, treatment timing)

Systematic reviews

Review characteristics	PICO of included studies	Results and conclusions	Assessment
Choi, T.-Y., Ang, L., Jun, J. H., Alraek, T., Birch, S., Lu, W., & Lee, M. S. (2022). Acupuncture for managing cancer-related fatigue in breast cancer patients: A systematic review and meta-analysis. *Cancers, 14*(18), 4419. https://doi.org/10.3390/cancers14184419			
Type of review Systematic review **Search strategy** ***Databases*** PubMed, EMBASE, Cochrane Library, CNKI, Wanfang, KoreaMed, OASIS, DBpia, KMbase, RISS, KISS From inception to June 2022 ***Data synthesis*** Meta-analysis ***Risk of bias /quality assessment*** Cochrane Risk of Bias tool	**Studies and participants** Women diagnosed with breast cancer (any stage), undergoing chemotherapy/radiotherapy/hormonal therapy or survivors reporting fatigue 12 RCTs, 1084 participants. **Intervention** Acupuncture (manual, electroacupuncture, auricular, warm acupuncture) **Control** Sham acupuncture, usual care, wait-list control. **Outcome measures and measurement tools** Fatigue scale scores, BFI; MFI; PFS; EORTC QLQ-C30 Fatigue; FACIT-Fatigue; TCM Symptom Evaluation / Effective Rate **Measure of treatment effect** SMD with 95% CI.	**Results for risk of bias assessment of primary studies included in review** Of the 12 RCTs, 3 were judged as having a low risk of bias in all domains. 4 were of high risk in at least one up to 3 domains (due to insufficient blinding and allocation concealment), the remaining 5 were of unknown risk of bias in several domains. **GRADE** Low (n=4), moderate (n=1), very low (n=1) certainty of evidence. **Results for outcome measures** ***Cancer Related Fatigue*** AT vs Sham AT: SMD = 0.26, 95% CI (0.51, 0.01), p = 0.04 CRF (F/U) (AT vs. sham AT) SMD = 0.32, 95% CI (0.59, 0.04), p = 0.02 AT vs UC: SMD = 0.39, 95% CI (0.66, 0.12), p = 0.005 AT vs WLC: SMD = 2.00, 95% CI (–3.15, 0.86), p = 0.0006 All low certainty of evidence. AT + UC vs UC: SMD = 1.02, 95% CI (–2.37, 0.32), p = 0.14. (moderate certainty) Response reate RR 1.19 (1.05 to 1.34) (very low certainty) ***Subgroup analyses*** Not feasible due to the insufficient number of studies included. **Adverse events** 3/12 reported on adverse events; one reported bruising the other did not specify AEs.	**Quality assessment of the SR** AMSTAR2 Moderate. Critical items fulfilled but limited handling of publication bias and limited analysis of how study quality influenced results. **Comments** Substantial clinical heterogeneity (acupuncture types, duration, treatment protocol; controls; patient population. Small sample sizes with limited power. No subgroup analyses performed due to small number of studies. “Effective rate” as outcome measure is not validated. Despite mostly low certainty of results, authors conclude acupuncture to be “an effective and safe treatment for CrF”.

		Conclusions "*Acupuncture is an effective and safe treatment for cancer-related fatigue in patients with breast cancer, and acupuncture is more effective than sham acupuncture, usual care or wait-list control. Nevertheless, the methodological quality of most of these studies was low, and the included studies/sample sizes were small, limiting the ability to draw decisive meaning.*"	
He, Y., Yuan, M., He, C., Zhu, D., & Wang, F. (2022). The effects of transcutaneous acupoint electrical stimulation on cancer-related fatigue and negative emotions in cancer patients: A systematic review and meta-analysis of randomized controlled trials. *Contrast Media & Molecular Imaging*, 2022. https://doi.org/10.1155/2022/1225253			
Type of review Systematic review **Search strategy** ***Databases*** PubMed, Web of Science, Embase, Cochrane Library, CNKI, CBM, Wanfang Database, VIP ***Dates*** From inception to July 1, 2021 **Data synthesis** Meta-analysis **Risk of bias /quality assessment** Cochrane Risk of Bias tool RoB (original version).	**Studies and Participants** Adults (>18 years) hospitalized with a cancer diagnosis (imaging or pathology). Total 9 RCTs, 924 participants; 6 thereof of CrF **Intervention** Transcutaneous Electrical Acupoint Stimulation (TEAS) **Control** Usual care comparators, described as conventional nursing care or health education/standard care during surgery/chemotherapy/palliative care **Outcome measure** CrFmeasured with RPFS **Measure of treatment effect** SMD with 95% CI.	**Results for risk of bias assessment of primary studies included in the review** Some concerns over blinding, allocation concealment and other bias for around 50% of RCTs.* Generally low risk of bias for incomplete outcome data, selective reporting, random sequence generation. **GRADE** not assessed. **Results for outcome measures** Significant reduction of CrF, depression, and anxiety and improvement of QoL. ***CrF*** TEAS vs usual care: SMD = −0.83, 95% CI (−0.99, −0.66) $p < 0.05$ **Subgroup analyses** According to sample size and duration, no significant differences between subgroups. **Conclusions** *"TEAS can reduce CRF, anxiety, and depression and improve the quality of life of cancer patients. The current results should be interpreted with caution, and high-quality RCTs with larger sample sizes are warranted in the future to study the impact of TEAS on cancer patients."*	**Quality assessment of the SR** **AMSTAR2** Low; no protocol registration, no meaningful integration of RoB into interpretation and additional non-critical weaknesses. ***Comments*** Authors conclude TEAS is effective, despite small evidence base, high heterogeneity with limited/no exploration, no sensitivity analyses; risk of bias. Reliance on fixed-effects model, publication bias assessment underpowered. Only a limited and largely descriptive presentation of RoB findings, without detailed study-level justification. *No study was assessed as high risk of bias for blinding despite known challenges with blinding for this intervention. Risk of bias was not meaningfully incorporated into the interpretation of results, and no sensitivity analyses were conducted to assess its impact.

Voigtländer S, Dörfler J, Hübner J. Acupuncture as treatment of cancer-therapy-induced fatigue: A critical systematic review with a focus on the methodological assessment of blinding. *J Cancer Res Clin Oncol.* 2026;152:37. doi:10.1007/s00432-025-06395-4

Type of review
Systematic review with narrative synthesis

Search strategy
Databases
Medline (Ovid), CINAHL (EBSCO), EMBASE (Ovid), Cochrane CENTRAL, PsycINFO (EBSCO).

Authors state the review was conducted in 2024 but do not provide a date range for the search.

Data synthesis
Narrative synthesis. Meta-analysis not performed due to high heterogeneity, high risk of bias, and low certainty of evidence.

Risk of bias /quality assessment
Cochrane risk-of-bias 2 tool for randomized trials (RoB-2)

Studies and participants
Adult cancer patients (≥18 years), any cancer type or stage.
15 RCTs, 1346 participants included

Interventions
Traditional manual acupuncture (therapist-delivered, incl. Saam): 9 RCTs
Manual acupuncture + adjunct partial electrostimulation (hybrid): 2 RCTs
ATAS acupuncture: 1 RCT.
Mind-regulating acupuncture: 1 RCT
Electroacupuncture (needle-based EA): 1 RCT (Mao 2014).
TEAS (transcutaneous electrical acupoint stimulation): 1 RCT

Controls
Acupuncture vs Sham (two-arm): 5 RCTs
Acupuncture vs Usual Care (two-arm): 4 RCTs
Acupuncture vs Sham vs Usual Care (three-arm): 4 RCTs
Acupuncture vs Self-acupuncture vs Control: 1 RCT
Acupuncture vs Acupressure vs Sham acupressure: 1 RCT

Outcome measure and measurement tools
Fatigue, BFI; BFI-C (Chinese version); PFS; RPFS VAS-F; MFI; MFI-20; FACIT-F; FSS; EORTC-QLQ-C30 (fatigue subscale within QoL) MDASI

Measure of treatment effect
No pooled effect estimate. Meta-analysis not performed due to high heterogeneity, high risk of bias, and low certainty of evidence.

Results for risk of bias assessment of primary studies included in review
14/15 RCTs were rated as "high risk of bias", only one study was rated as "low risk of bias. Main sources of bias were insufficient blinding, incomplete data analysis (no ITT), small sample sizes and high dropout rates,

GRADE Overall certainty of evidence was rated as very low mainly due to serious concerns about risk of bias, imprecision, and indirectness.

Results for outcome measures
Traditional manual acupuncture
Six of nine studies reported significant improvements or reductions in fatigue. Three reported no significant differences.

Other acupuncture therapies included only one or two RCTs.

Subgroup analyses
Not conducted.

Adverse Events
Mild adverse events were reported in six studies, while most reported no adverse events. Three studies reported no information on adverse events.

Conclusions
"We are unable to make firm judgments regarding the efficacy of acupuncture in treating cancer-related fatigue due to the inconsistent outcomes and methodological constraints of the current research. The total data is still insufficient despite the inclusion of 15 researches because of several issues with study design and contradictory findings."

Quality assessment of the SR
Low according to AMSTAR2 assessment. No protocol registered and no synthesis method (e.g. SWiM) was not specified.
Publication bias not assessed but stated for one study.

Comments
Language and database restrictions: only articles published in English and German were included, and only databases in these languages were searched.

High risk of bias in included studies, small sample sizes and high dropout rates, clinical and methodological heterogeneity, incomplete or inconsistent reporting, potential publication bias. low certainty of evidence.

Acupressure

Review characteristics	PICO of included studies	Results and conclusions	Assessment
Hsieh, S.-H., Wu, C.-R., Romadlon, D. S., Hasan, F., Chen, P.-Y., & Chiu, H.-Y. (2021). The effect of acupressure on relieving cancer-related fatigue: A systematic review and meta-analysis of randomized controlled trials. Cancer Nursing, 44(6), E578–E587. https://doi.org/10.1097/NCC.0000000000000997			
Type of review Systematic review **Search strategy** ***Databases*** PubMed, Embase, CINAHL, ProQuest ***Dates*** From inception until 17th July 2020 **Data synthesis** Meta-analysis **Risk of bias /quality assessment** Cochrane risk-of-bias tool RoB (original version)	**Studies and participants** Adults (≥18 years) diagnosed with cancer. 9 RCTs, 776 participants (798 included in meta-analysis) 5 RCTs regarding acupuncture. **Intervention** Manual acupressure 9 RCTs, Auricular acupressure 3 RCTs, relaxing acupressure 4 RCTs, stimulating acupressure 4 RCTs, low-dose/high-dose stimulatory acupressure. **Control** Sham acupressure comparisons: 5 RCTs, usual care comparisons 6 RCTs, other active comparators (e.g., acupuncture, stimulatory dose comparisons): 3 RCTs **Outcome measures and measurement tools** CrF measured with VAS-F, BFI; CFS) / CFS-Chinese version; FACIT-F; MDASI; TFRS; MFI. **Measure of treatment effect** SMD with 95% CI.	**Results for risk of bias assessment of primary studies included in review** 7 trials demonstrated an overall high risk of bias, 5 trials had an overall low risk of bias, 2 some concerns. Blinding of participants and personnel, concealed allocation, and inappropriate analysis were the main causes of high risk of bias. **GRADE** not assessed. **Results for outcome measures** Acupressure considerably alleviated cancer-related general, physical, and mental fatigue. ***General fatigue*** SMD = −0.87, 95% CI (−1.19, −0.55) p-value < 0.001 ***Physical fatigue*** SMD = -0.87, 95% CI (-1.18, -0.56) p-value < 0.01 ***Mental fatigue***: SMD = −0.37, 95% CI (−0.65, −0.08), p-value < 0.01 **Subgroup analysis** Increasing female percentage of participants significantly reduced effects. Executor and operation approach, treatment period during chemotherapy did not moderate effects. ***Adverse Events*** No statistical difference in the risk between the acupressure and control groups **Conclusions** “Acupressure is effective at alleviating cancer-related fatigue”. “… the practice of acupressure by either professionals or patients themselves can be considered as an intervention for alleviating cancer-related fatigue during and after chemotherapy.”	**Quality assessment of the SR** moderate according to AMSTAR 2 checklist. No critical flaws identified but RoB was only partially included in interpretation of findings. Minor weaknesses in non-critical domains. **Comment** Certainty of evidence not formally assessed. Overly optimistic conclusion despite methodological limitations mentioned. Heterogeneity remained high across many outcomes. Many of the studies included had high risk of bias or showed some concerns.

Moxibustion

Review characteristics	PICO of included studies	Results and conclusions	Assessment
Bae, H.-R., Kim, E.-J., Ahn, Y.-C., Cho, J.-H., Son, C.-G., & Lee, N.-H. (2024). Efficacy of moxibustion for cancer-related fatigue in patients with breast cancer: A systematic review and meta-analysis. Integrative Cancer Therapies, 23, 1–13. https://doi.org/10.1177/15347354241233226			
Type of review Systematic review ***Databases*** PubMed, EMBASE, Cochrane Library, Research Information Service System (Korea), Korean Studies Information Service System, China National Knowledge Infrastructure, Japan Science Technology Information Aggregator (J-STAGE) ***Dates*** From database inception to March 2023 **Data synthesis** Meta-analysis **Risk of bias assessment** Cochrane Collaboration's tool	**Studies and participants** Patients (≥18 years) diagnosed with breast cancer or breast cancer survivors experiencing cancer-related fatigue 10 RCTs, 744 participants **Interventions** Moxibustion (direct, indirect, infrared laser) **Comparisons** Sham moxibustion, usual care (e.g., psychosocial interventions, education, conventional medications), or no treatment **Outcome measures and measurement tools** Fatigue measured with PFS-R; CFS; KPS; AIS; Qi Deficiency Syndrome Scale Clinical efficacy (based on TCM syndrome score) **Measure of treatment effect** WMD and RR 95% CI.	**Results for risk of bias assessment of primary studies included in the review** 9/10 RCTs were judged at low risk of bias for random sequence generation, incomplete outcome data, selective reporting. Only one was judged as high risk of selective reporting. All remaining domains were judged at unclear risk. * **GRADE** not assessed. **Results for outcome measures** Significant improvement of CrF measured with: PFS-R: SMD = −1.20, 95% CI (−1.79, −0.60) p-value < 0.0001 KPS: SMD = 12.16, 95% CI (9.50, 14.82), p-value < 0.0001 Qi Deficiency Syndrome Scale SMD = 12.97, 95% CI (7.33, 18.60) p-value< 0.0001 Clinical Efficacy (TCM index) RR = 2.66, 95% CI (1.51, 4.68) p-value=0.0007 Improvement not significant when measured with CFS and AIS. **Adverse events** No serious adverse events were reported. ***Conclusions*** "This study showed that moxibustion improved CRF and quality of life in patients with breast cancer. The meta-analysis of 10 RCTs demonstrated that moxibustion decreased the PFS-R score, decreased the Qi deficiency syndrome scale score, improved the clinical efficacy, and increased the KPS score. No serious adverse events were reported in any of the RCTs."	***Quality assessment of the SR*** **L**ow according to AMSTAR 2 checklist. Publication bias was not assessed and concerns about risk of bias were not identified when interpreting the results.* **Comment** The positive findings of the SR are moderated by its low quality and underlying methodological weaknesses. *None of the studies were judged at high risk in any of the domains (except one study in one domain) even though moxibustion was compared to usual care in most RCTs, which makes blinding impossible. Included studies had high heterogeneity. All studies were conducted in China, limiting generalizability to other populations.

Abbreviations

AIS: Athens Insomnia Scale
AU = acupressure
BFI: Brief Fatigue Inventory
CES-D: Center for Epidemiological Studies Depression
CFS: Cancer Fatigue Scale
CrF: Cancer-related fatigue
CI confidence interval
EA: electroacupuncture
EORTC QLQ-BR23: European Organization of Research and Treatment of Cancer Quality of Life Questionnaire Breast Module
EORTC QLQ-C30: European Organization of Research and Treatment of Cancer Quality of Life Questionnaire
FACIT-F: Functional Assessment of Cancer Therapy–Fatigue
FSS: Fatigue Severity Scale
KISS: Korean Studies Information Service System (KISS)
KPS: Karnofsky Performance Scale
MA: manual acupuncture
MDASI: MD Anderson Symptom Inventory
MFI: Multidimensional Fatigue Inventory
nRCT: non-randomized controlled trial
PA = point application
PFS: Piper Fatigue Scale
PSQI- The Pittsburgh Sleep Quality Index
QoL: Quality of life
RCT: randomized controlled trial
RISS: Research Information Sharing Service
RoB: Cochrane Risk of Bias Tool version 1
RoB2: Cochrane Risk of Bias Tool version 2
RPFS /PFS: Revised Piper Fatigue Scale
RR: risk ratio
SA: Sham acupuncture
SF-8: Short-Form Health Survey-8 (measurement of bodily pain; higher score on bodily pain indicates less pain);
SMD: standardized mean differences
SNVR: Skilled Nursing Visit Report form (measurement of pain);
SUCRA (Surface Under the Cumulative Ranking Curve)
TEAS = transcutaneous electric acupoint stimulation
TFRS: Tang Fatigue Rating Scale
UC: Usual care (UC),
VAS / VAS -F: Visual analog scale / Visual Analog Scale for Fatigue
WL: Wait list

***AMSTAR 2 Critical Domain Items**

1. Was the review protocol established a priori (e.g., registered in PROSPERO)?
2. Was the search comprehensive and included multiple databases, grey literature, and appropriate search strategies?
3. Did the authors provide a list of excluded studies and justify the exclusions?
4. Was the risk of bias (RoB) of included studies assessed using appropriate tools?
5. If a meta-analysis was conducted, were the methods used appropriate and clearly described?
6. Did the authors consider the RoB in individual studies when discussing the results?
7. Was publication bias assessed and discussed appropriately?