

**Table 2: Controlled clinical trials of qigong for cancer**

Source: Pawel Posadzki, Ava Lorenc, CAM Cancer Consortium. Qigong [online document]. <http://www.cam-cancer.org/CAM-Summaries/Qigong>, May 2022

First author year	Study design	Participants	Interventions	Main outcome measures	Main results	Comments
Chan 2013 (Conference abstract)	RCT	Ninety-six pairs of mixed cancer patients and their caregivers (n=192)	1) 10 session qigong training 2) Waitlist controls	1) Salivary cortisol 2) Perceived stress and sleep quality	Patients – increased cortisol levels after intervention (all $p < 0.05$ ) Caregivers – no significant changes in salivary cortisol after intervention, flatter diurnal slope at follow up. No reported changes in perceived stress or sleep quality amongst patients or caregivers.	No perceived changes in stress amongst the participants despite reported increased cortisol levels and flatter diurnal slope. Salivary cortisol might be an inappropriate measure of stress following an exercise intervention.
Fong 2014a	Single-blinded, non-randomized CT	Breast cancer survivors with breast cancer-related lymphedema (n=23)	1) Participants with qigong experience were assigned to a 6 minute Qigong session 2) Participants without qigong experience were assigned to the control group – 6 minutes of quiet rest.	1) Upper limb circumference 2) Arterial resistance and blood flow velocities of affected upper limb	1) Decreased after qigong exercise ( $p < 0.05$ ) but no significant differences between the two groups ( $p > 0.0125$ ). 2) Arterial resistance decreased and blood flow increased after qigong (all $p < 0.05$ ). Significant between-group differences for arterial resistance ( $p < 0.05$ ) and diastolic blood flow velocity ( $p < 0.001$ ) but not systolic blood flow ( $p = 0.018$ ).	Small sample size, not randomized. There was no follow-up time point in this study to look at the longer-term impact of qigong on these outcomes.

Molassiotis 2021	RCT	156 lung cancer patients	1) Qigong: 90-minute, twice per week for the first 2 weeks; then at home for at least 30 minutes a day, 5 days per week for 4 weeks 2) waiting list	1) Breathlessness-Fatigue-Anxiety (composite outcome)	1) no between group difference (within-group improvements)	Validity and reliability of composite scores is questionable. Also vague inclusion criteria allowing to enter the trial only patients with the cluster of symptoms. 60% of patients in the qigong group dropped out.
Yang 2021	RCT	80 gastrointestinal cancer patients undergoing chemotherapy	1) qigong five sessions each week + conventional treatment for 4 weeks 2) conventional treatment only.	1) Depression 2) Quality of life	1) significantly improved (p<0.05) 2) significantly improved (p<0.05)	Incomplete baseline characteristics, validity and reliability of outcome measures is questionable. Small sample, unblinded, no long-term effectiveness data.