

Table 2: Controlled clinical trials of tai chi for cancer

Source: Pawel Posadzki, CAM-Cancer Consortium. Tai chi [online document] <https://cam-cancer.org/en/tai-chi>, March 2022.

First author year	Study design	Participants (number, diagnosis)	Interventions (experimental treatments, control)	Main outcome measures	Main results	Comments
Zhou 2018	RCT	Nasopharyngeal Carcinoma patients undergoing chemoradiotherapy (n=83)	1. Tai chi 2. Usual care	1. Multidimensional fatigue symptom Inventory short form (MFSI-SF) 2. heart rate variability parameters	Tai chi group had lower MFSI-SF total score and three negative subscale (general, physical, and emotional fatigue) scores and higher vigour score compared to control (all p<0.01).	Small sample size (not powered) and quite high dropout (n=31; although ITT analysis used). Randomisation seems adequate. Very short follow-up (immediately after chemoradiotherapy completed). Tai chi taught by professionals who learned it only for the study.
Irwin 2014	RCT	Breast cancer patients with insomnia (n=90)	1. Tai chi 2. Cognitive behavioural therapy	Immune and inflammatory markers	Levels of CRP did not change from baseline to posttreatment in the two groups (CBT-I p=0.13, tai chi p=0.44), Tai chi group: decreased TLR-4-activated monocyte production of IL-6 and TNF, reduced expression of genes encoding pro-inflammatory mediators, increased expression of genes involved in antiviral responses in peripheral blood mononuclear cells.	Lack of change in CRP results may have been due to short intervention time. (16 weeks)  Participants were aware of their intervention assignment, which may have introduced bias in the results, although expectancy for benefit was similar in the two groups.
Jiang 2020	Single blind RCT	Lung cancer patients (n=100)	1. Tai chi 2. Usual care (physical exercise)	Lung function 1. FEV-1 2. FVC 3. Pain (VAS)	Improved lung function, and reduced pain scores at 2 and 3 months post-intervention (p<0.05) in tai chi compared with usual care.	A convenience sampling may introduce bias, long-term effects remain unclear, relatively small sample, unclear who was blind to the intervention.

RCT: Randomised clinical trial  
ITT: Intention to treat  
FEV-1: forced expiratory volume in 1<sup>st</sup> second

FVC: forced vital capacity  
VAS: visual analogue scale

CBT: Cognitive behavioural therapy  
CRP: C-reactive protein

