

Table 1: Randomised controlled trials of aromatherapy for cancer

Source: Karen Pilkington, Helen Seers, CAM-Cancer Consortium. [Aromatherapy](#) [online document], February 2020.

Outcome	First author year	Type of study	Participants (diagnosis, N)	Intervention groups	Results (significant)	Comments
Symptomatic						
Fatigue/sleep	Tang 2014	RCT (Pilot)	57 lung cancer patients, various stages undergoing chemotherapy	(1) Acupressure and essential oils (2) Acupressure only (3) Sham acupressure Daily for 5 months	(1) and (2) less fatigue but difference from (3) not significant. Some differences in sleep quality but not consistent at both time points.	Randomisation adequate; allocation concealment unclear Blinding not possible and outcome self-assessed Power calculated and sample size achieved Intention to treat analysis was not used and attrition was marked in one group
Overall wellbeing/ QoL/comfort	Serfaty 2012	RCT (pilot)	39 patients with various types of cancer	(1) Treatment as Usual (TAU) plus up to eight sessions weekly of aromatherapy massage (2) TAU plus up to eight sessions weekly of CBT	No significant differences after 3 and 6 months' follow-up in EuroQoL between groups. EuroQoL scores suggested an improvement with both interventions.	Randomisation and allocation concealment adequate Blinding not possible Power: only post-hoc calculation

						Intention to treat unclear but very low attrition
Psychological						
Anxiety	Serfaty 2012	RCT	39 patients with various types and stages of cancer	(1) standard care + up to 8 sessions / week of aromatherapy massage (2) standard care + up to 8 sessions / week of CBT	Significant improvements in POMS but only pre/post within groups	Randomisation and allocation concealment adequate Blinding not possible Power: only post-hoc calculation Intention to treat unclear but very low attrition
	Pimenta 2016	RCT	42 patients with chronic myeloid Leukaemia	(1) Diazepam (2) Citrus aurantium L. essential oil diffused into room (3) Control saline solution diffused into room for 30 minutes	Inhalation of Citrus oil associated with decrease in STAI-S and improved physiological measures of stress (blood pressure, cardiac and respiratory frequency – showing a reduction in anxiety after aromatherapy), compared to placebo in diazepam group where only blood pressure decreased.	Randomisation and allocation concealment unclear Blinding not possible Power not mentioned Intention-to-treat not mentioned; unclear on attrition
Depression	Surfaty 2011		39 patients with various types and	(1) standard care + up to 8 sessions / week of aromatherapy massage	Between-group comparison showed a non-significant trend towards	Randomisation and allocation concealment adequate

			stages of cancer	(2) standard care + up to 8 sessions / week of CBT	greater improvement in depression with CBT.	Blinding not possible Power: only post-hoc calculation Intention to treat unclear but very low attrition
	Tang 2014	RCT (Pilot)	57 lung cancer patients, various stages undergoing chemotherapy	(1) Acupressure and essential oils (2) Acupressure only (3) Sham acupressure Daily for 5 months	(1) and (2) lower depression but difference from (3) not significant.	Randomisation adequate; allocation concealment unclear Blinding not possible and outcome self-assessed Power calculated and sample size achieved Intention to treat analysis was not used and attrition was marked in one group

RCT = randomised controlled trial

QoL = Quality of life