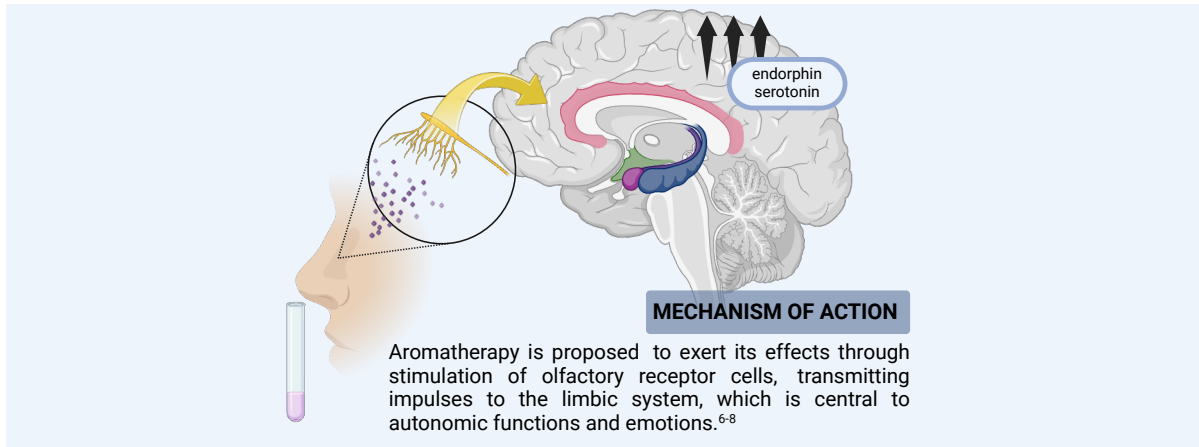


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INTRODUCTION

- Cancer patients endure symptoms not only from the disease, but also its treatment
- Adverse effects include nausea, vomiting, pain, fatigue, and anxiety, markedly reducing quality of life and presenting challenges to treatment adherence¹
- Aromatherapy is a non-invasive, low-risk, and low-cost intervention
- Preliminary evidence have shown essential oils ginger, lavender, orange, and lemon are effective in symptom management, however further clinical studies are necessary to establish its therapeutic benefits²⁻⁵



OBJECTIVE

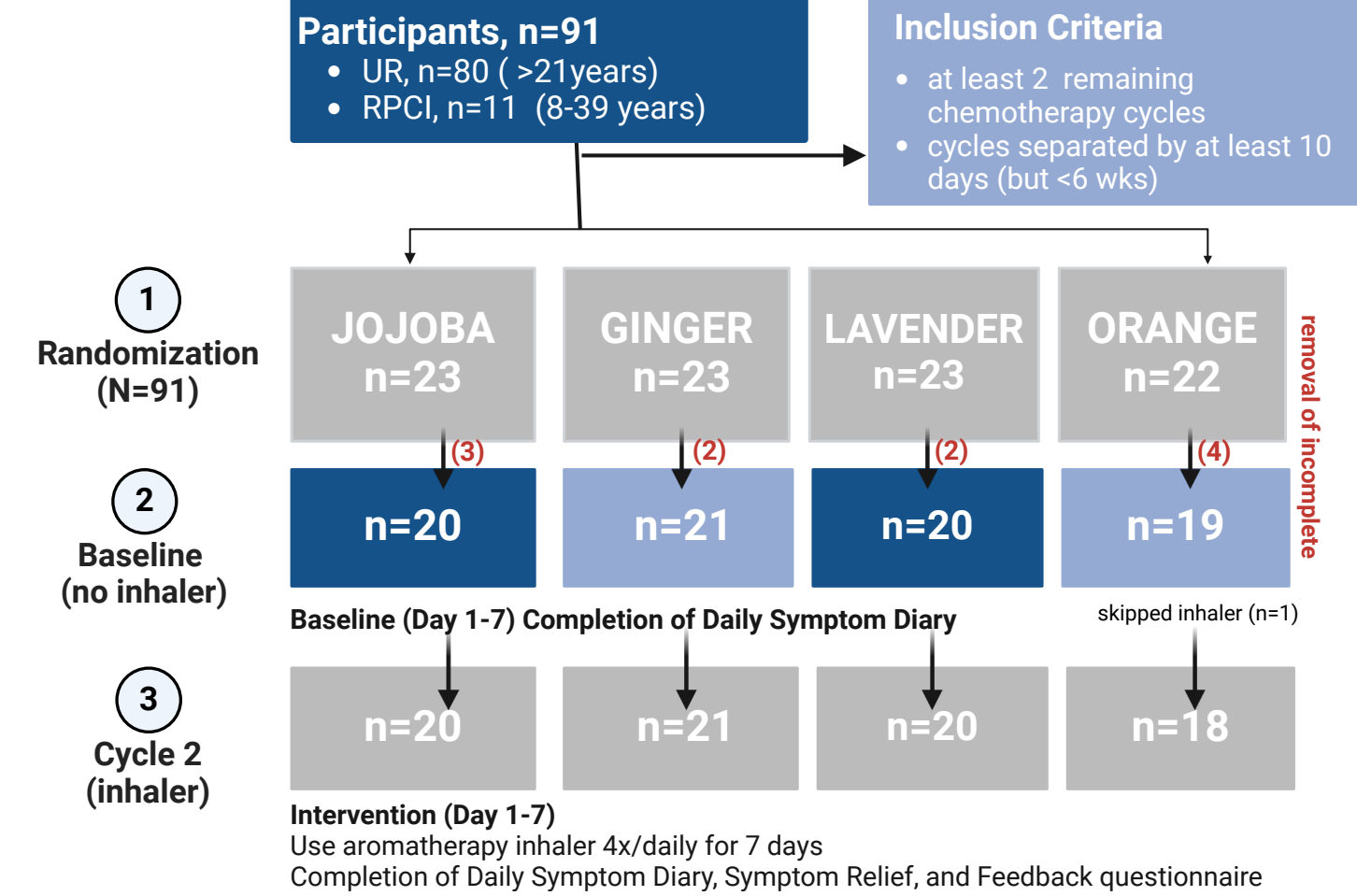
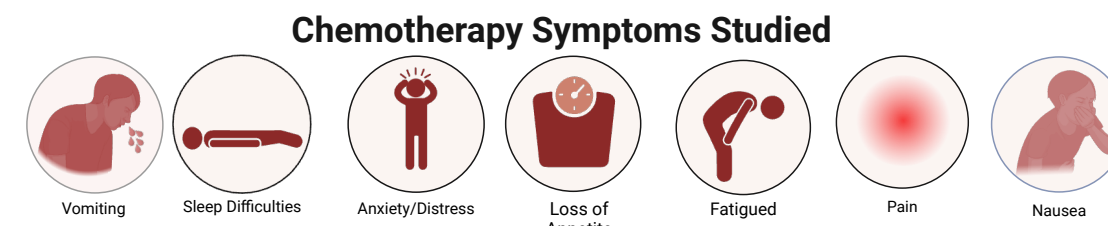
To conduct a blinded, randomized clinical trial to evaluate the feasibility and benefit of four aromatherapy scents (ginger, lavender, and orange, and jojoba) in management of chemotherapy-related symptoms.

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METHODS

Measurement Tools	
Symptom Diary	Document severity of each symptom once daily using a 0-10 rating scale and if applicable, the use of additional medications for symptom management
Symptom Relief Form	Document improvement in symptom management with intervention compared to baseline cycle
Feedback Questionnaire	Obtain qualitative feedback to evaluate acceptability and feasibility of the aromatherapy inhalers

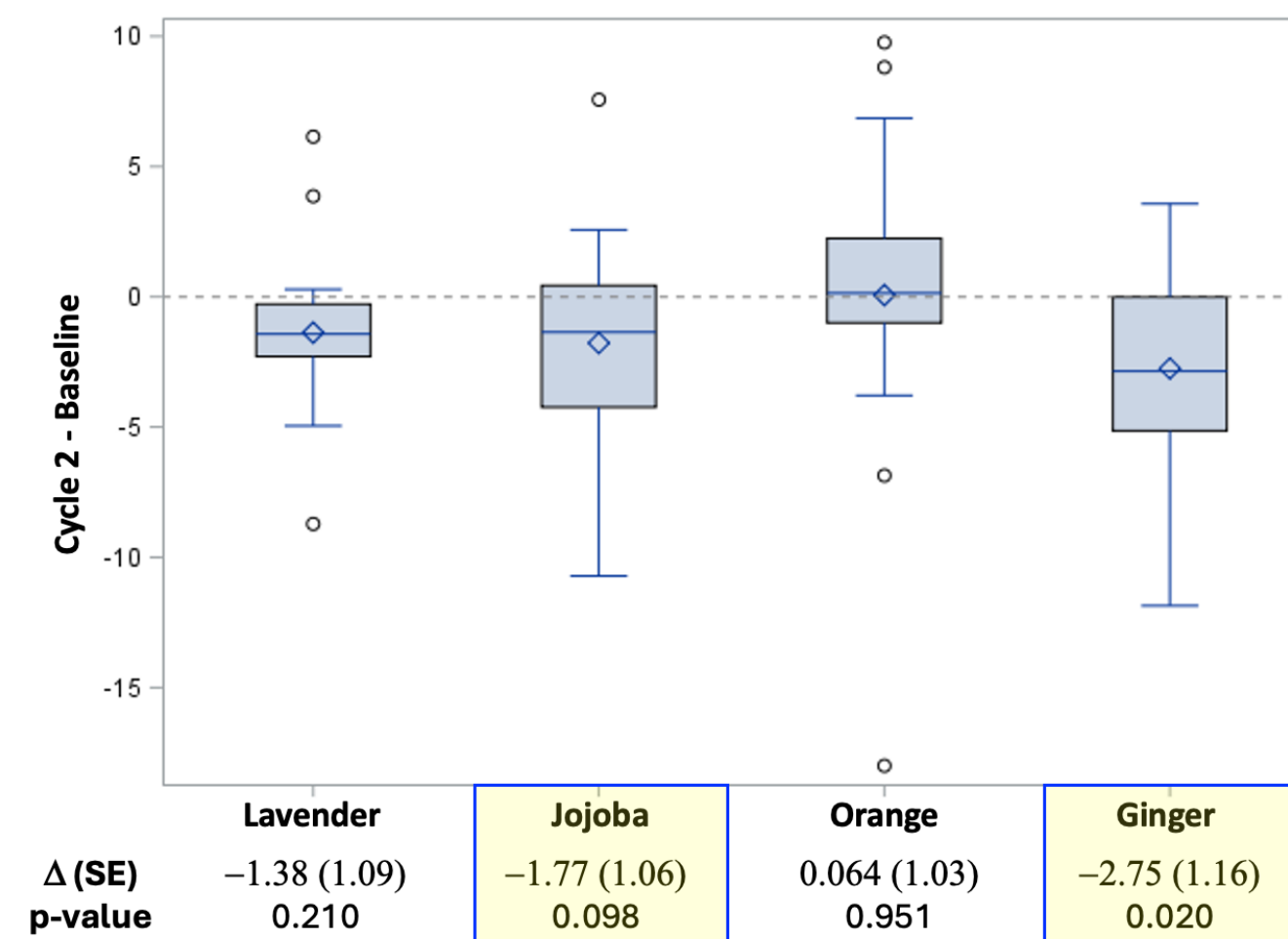


RESULTS

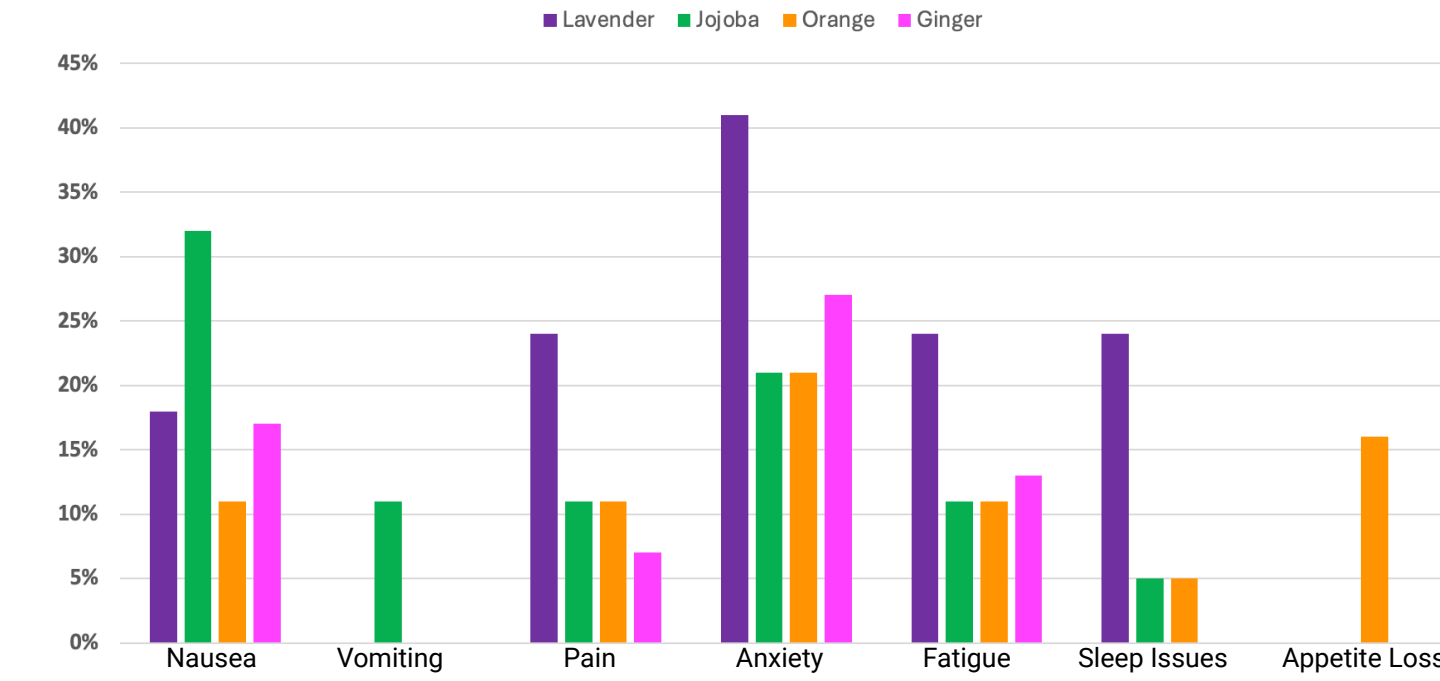
	%	90% Confidence Interval
Overall Retention Rate	86.8%	[79.5, 92.2]
Overall Aromatherapy Compliance Rate	88.6%	[81.0, 93.9]
Overall Aromatherapy Recommendation Rate	82.5%	[72.7, 89.9]

	Subjects Correctly Identified Aromatherapy
Overall	22%
Lavender	33%
Jojoba	22%
Orange	29%
Ginger	0%

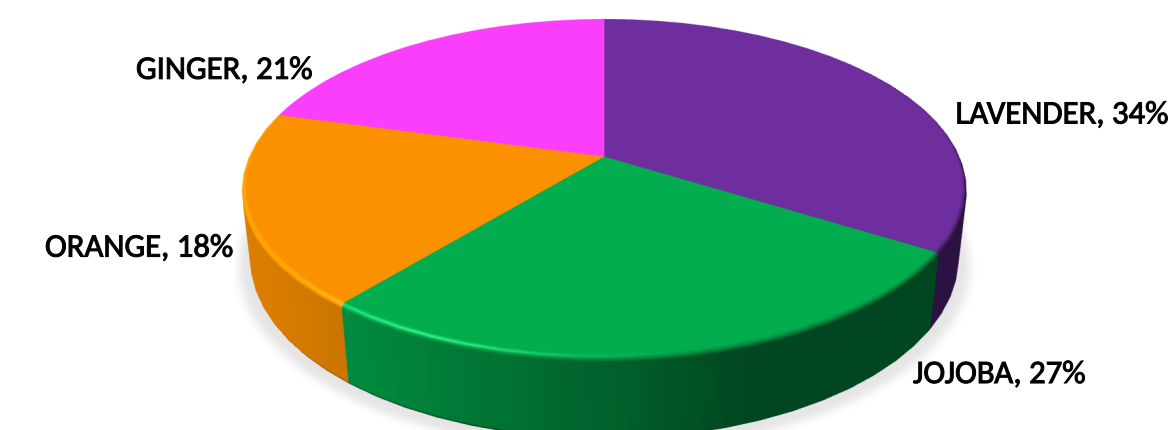
Change in Mean Composite Symptom Severity Score (CSSS)



PERCENT SUBJECTS REPORTING REDUCED SYMPTOM SEVERITY BY AROMATHERAPY



AROMATHERAPY HELPED REDUCE SYMPTOMS



STUDY POPULATION

		Lavender (N=23)	Jojoba (N=23)	Orange (N=22)	Ginger (N=23)	Total (N=91)
Site, n (%)	URMC	19 (82.6)	22 (95.7)	20 (90.9)	19 (82.6)	80 (87.9)
	RPCI	4 (17.4)	1 (4.4)	2 (9.1)	4 (17.4)	1 (12.1)
Age	Mean (min, max)	46 (13, 79)	50 (15, 68)	52 (16, 74)	51 (15, 79)	50 (13, 79)
	Median (IQR)	47 (26, 59)	51 (42, 61)	56 (43, 62)	42 (41, 63)	52 (42, 61)
Gender, n (%)	Male	2 (8.7)	3 (13.0)	3 (13.6)	4 (17.4)	12 (13.2)
	Female	21 (91.3)	20 (87.0)	19 (86.4)	19 (82.6)	79 (86.8)
Race, n (%)	White	19 (82.6)	19 (82.6)	20 (90.9)	21 (91.3)	79 (86.8)
	Black	3 (13.0)	3 (13.0)	2 (9.1)	2 (8.7)	10 (11.0)
	Asian	1 (4.4)	0	0	0	1 (1.1)
	Missing	0	1 (4.4)	0	0	1 (1.1)
	Hispanic Ethnicity, n (%)	2 (8.7)	1 (4.4)	0	2 (8.7)	5 (5.5)
Cancer Type, n (%)	Leukemia	0	0	0	1 (4.4)	1 (1.1)
	Hematologic	3 (13.0)	1 (4.4)	2 (9.1)	1 (4.4)	7 (7.7)
	Head & Neck	0	0	0	2 (8.7)	2 (2.2)
	Lung	0	0	0	2 (8.7)	2 (2.2)
	GI	1 (4.4)	5 (21.7)	2 (9.1)	3 (13.0)	11 (12.1)
	GU	0	0	0	1 (4.4)	1 (1.1)
	Gynecologic	4 (17.4)	5 (21.7)	7 (31.8)	6 (26.1)	22 (24.2)
	Breast	14 (60.9)	12 (52.2)	10 (45.5)	7 (30.4)	43 (47.3)
	Sarcoma	0	0	1 (4.6)	0	1 (1.1)
	Missing	1 (4.4)	0	0	0	1 (1.1)

CONCLUSIONS

- Blinding appeared successful with only 22% of subjects identifying their correct aromatherapy arm.
- Aromatherapy is an acceptable and feasible complementary approach for managing chemotherapy-related symptoms.
- Given the variation in symptom relief across aromatherapy scents, future studies should investigate the effectiveness of aromatherapy blends on overall symptom relief.

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