Real-World Adherence to Non-Hormonal Therapies for Menopause-Related Vasomotor Symptoms: a Targeted Literature Review

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INTRODUCTION

- Vasomotor symptoms (VMS), also known as hot flashes, are among the most common symptoms of menopause. Up to 80% of women experience them.[1,2]

- Non-hormonal therapies are used to manage VMS. However, apart from paroxetine (US) and clonidine (UK), most are not indicated for VMS.[3,4]

OBJECTIVE

- **To describe the non-hormonal therapy (non-HT) patterns of women with VMS associated with menopause based on recent literature (2022–2025).**

METHODS

- This targeted literature review (TLR) followed the best practices for implementation and reporting in accordance with the Preferred Reporting Items for Systematic Literature Reviews and Meta-Analyses (PRISMA) statement.
- Searches were conducted in the MEDLINE and Embase databases as well as grey literature (including relevant conference and organization websites from January 1, 2022 to March 29, 2025).
- Study selection was based on the Population, Intervention, Comparator, Outcome, Study Design (PICOS) framework. Non-English language studies were excluded.
- Observational studies that reported clinical, humanistic, and economic outcomes related to women experiencing VMS associated with menopause, or in mixed populations including perimenopausal and postmenopausal women, were included.

SEARCH RESULTS

- The TLR was based on 44 studies reported in 51 publications.
- Treatment patterns for VMS associated with menopause were described in 30 studies in 34 publications.
- Most studies were conducted in the US (n=14), UK (n=7), and Canada (n=5), with five multinational studies.

TREATMENT PATTERNS

- SSRIs and SNRIs are the most commonly prescribed non-HTs for VMS. In the US, their use reached 38.6% in women with moderate-to-severe VMS.[5,6]

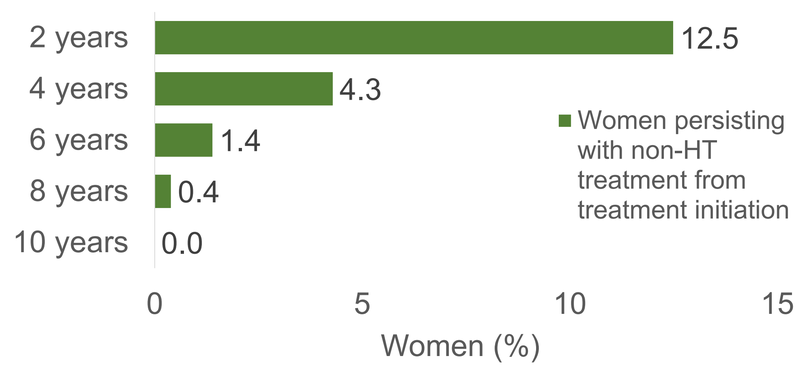
The proportion of women receiving non-HT prescription medications for moderate-to-severe VMS* varied among geographies.[5–8]

Non-hormonal therapy†	Multinational‡[7,8]	5.2% – 15.7%
	Canada[7]	7.0%
	US[6]	10.9% – 23.8%
SSRIs	Multinational§[8]	3.0% – 6.3%
	US[5]	28.4%
SNRIs	Multinational§[8]	0.1% – 7.9%
	US[5]	10.2%
Clonidine	Multinational§[8]	2.1%
	US[5]	4.2%
Gabapentin	Multinational§[8]	2.8%
	US[5]	19.2%
Oxybutynin	US[5]	7.0%

*Moderate-to-severe VMS defined as: moderate sweating in addition to the feeling of warmth; severe: excessive warmth and sweating that force woman to stop her daily activities.
†Aggregate of multiple treatment classes reflecting reporting in original publication.
‡Aggregated data from Canada, Denmark, Finland, Norway, Sweden, Brazil, Mexico.
§Aggregated data from France, Germany, Italy, Spain, UK, US.
SNRI, serotonin-norepinephrine reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor; UK, United Kingdom; US, United States; VMS, vasomotor symptoms.

TREATMENT ADHERENCE AND SATISFACTION

A large UK population-based study using electronic medical records (n=90,434) reported that under 13% of women remained on non-HT treatments* after two years.[9]



*Clonidine, SSRI/SNRI, antiepileptics (gabapentin, pregabalin), amitriptyline.
Non-HT, non-hormonal therapy.

Non-HT treatment duration varied between survey-based and electronic health record studies.[8–10]

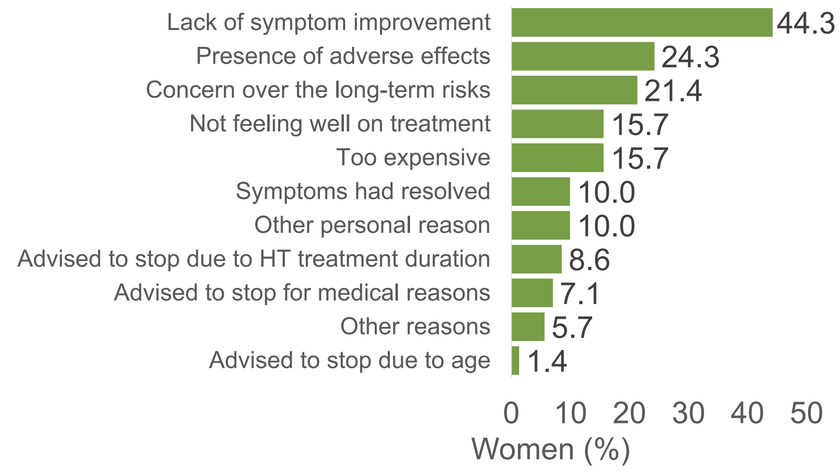
Longitudinal, electronic health record database studies			
UK[9]	Women with incident VMS (**n=90,434**)	Non-HT (inc. SSRI/SNRI and anti-epileptics)	Median **3.9 months**
Survey-based, cross-sectional studies			
Multinational*[8]	Women with moderate-to-severe VMS	SSRI/SNRI (n=111)	17.3 (21.9) months
		SSRI and other (n=36)	11.2 (13.5) months
		Other (n=118)	18.0 (20.9) months
US[10]	Women with VMS	Non-HT (inc. SSRI/SNRI and OTC) (n=61)	23.1 (25.6) months

Reported values are mean (standard deviation) unless otherwise stated.
*Aggregated data from France, Germany, Italy, Spain, UK, US.
Non-HT, non-hormonal therapy; OTC, over-the-counter. ; SNRI, serotonin-norepinephrine reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor; UK, United Kingdom; US, United States; VMS, vasomotor symptoms.

- Three studies reported non-HT treatment discontinuation rates ranging from 6.5%–14.3% in the US to 8.2% in Italy.[5,6,11]

REASONS FOR DISCONTINUATION: NON-HT

- **Lack of improvement of menopause symptoms** reported by 53.8% of women (Canadian study, n=13).[12]
- **Lack of symptom improvement,** also the most common reason in a multinational* study (n=70).[7]



*Included women from Canada, Denmark, Finland, Norway, Sweden, Brazil, Mexico.
HT, hormone therapy.

SATISFACTION RATES: NON-HT

Among women with moderate-to-severe VMS (87%[10]-100%[5])

- **46% were somewhat satisfied with non-HT.[10]**
- **1.6% were very satisfied with non-HT.[10]**
- **Satisfaction scores measured with MS-TSQ indicate moderate-to-high satisfaction with non-HT.*[5]**
  - Scores ranged between 59.8 (SSRI) to 69.7 (oxybutynin).

However, most women (76%) would try a new oral non-HT for VMS if it offered better symptom control and fewer long-term safety concerns than current treatments[5]

*According to a US-based survey among peri- or postmenopausal women aged 40–65 years who had taken non-hormonal treatments for VMS in the past 3 months (N=401). MS-TSQ is a patient-reported outcome measure assessing satisfaction with treatments for menopause symptoms using a 0–100 scale (higher scores indicate greater treatment satisfaction).
MS-TSQ, Menopause Symptoms Treatment Satisfaction Questionnaire.

CONCLUSIONS

✅ A significant proportion of women experiencing VMS remain untreated. Women with higher VMS frequency/severity are more likely to receive treatment.

✅ Large, population-based studies report high discontinuation rates with non-HTs, suggesting a potential lack of effectiveness, whereas survey-based studies enrolling smaller select populations report longer non-HT treatment durations, suggesting potential recall and/or selection biases.

✅ The most common reasons for discontinuation of non-HT treatments included lack of efficacy and safety concerns.

✅ Among women remaining on non-HT, survey-based studies report moderately high satisfaction rates; however, most (76%) of the women surveyed would switch to a more efficacious and safe non-HT to manage VMS, highlighting the remaining unmet need.

⚠️ Limitations: this TLR focuses on recent publications (2022-2025) excluding studies falling outside this range.

⚠️ Differences in study design and source populations can lead to variation in results; therefore, results should be interpreted with caution, highlighting the need for large-scale, population-based studies.

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DISCLOSURES

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