Acta Medica Young Doctors
ISSN: 3108-4532
Volume 2 Issue E

Global Research Trends in Menopause: A Scopus-Based Bibliometric and Science Mapping Analysis, 2021–2025

Original Article

Zeynel Umut Canbaba[1]

1. Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye

ABSTRACT

Background: Menopause represents a significant transition in women's health, with growing scientific interest in its endocrine, metabolic, oncological, and psychosocial consequences. This study aimed to evaluate global research trends, publication patterns, and emerging thematic priorities in menopause-related literature.

Methods: A bibliometric analysis was conducted using the Scopus database. English-language journal articles and reviews published between 2022 and 2025 were retrieved using menopause-related search terms. Publication trends, journal productivity, citation characteristics, open-access distribution, and major research themes were evaluated through descriptive bibliometric analysis.

Results: A total of 17,195 records were identified, including one publication indexed in 2026. Annual publication counts were 4,241 in 2022, 4,015 in 2023, 4,151 in 2024, and 4,787 in 2025. Open-access publications accounted for 71.38% of the dataset. Menopause, Maturitas, and Frontiers in Endocrinology were among the most productive journals. The publications accumulated 202,187 citations. The dominant research themes included hormone-dependent malignancies, osteoporosis and bone health, menopausal hormone therapy, and cardiometabolic disorders, particularly metabolic dysfunction-associated steatotic liver disease.

Conclusion: Global menopause research demonstrates sustained scientific productivity and an increasingly multidisciplinary orientation. The research landscape has expanded beyond symptom management toward long-term oncological, skeletal, and cardiometabolic health. Future investigations should prioritize personalized treatment strategies, longitudinal studies, and equitable access to menopause-related healthcare.

Keywords: Menopause; Bibliometric Analysis; Scopus; Science Mapping; Research Trends; Women's Health

Introduction

As global life expectancy continues to rise, the proportion of women’s lifespans spent in post-menopausal senescence has increased, necessitating a robust, data-driven understanding of the evolving menopausal research landscape (1). Recent bibliometric assessments confirm that academic engagement with the menopausal transition has intensified, reflecting a heightened scholarly focus on the multidisciplinary challenges associated with this phase (2). This study aims to provide a comprehensive bibliometric and science mapping analysis of global menopause research from 2021 to 2025, utilizing Scopus data to identify key

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

thematic shifts, prominent collaborative networks, and critical evidence gaps in the literature. By synthesizing publication trends and keyword co-occurrence patterns, this research clarifies the conceptual evolution of the field and serves as a foundational roadmap for future academic and clinical initiatives.

Consequently, menopause has emerged as a significant focus of global scholarly inquiry, with bibliometric methodologies enabling the identification of critical research hotspots and patterns of intellectual development (3). This study addresses this mandate by performing a comprehensive bibliometric and science mapping analysis of menopausal research indexed in Scopus from 2016 to 2025.

Literature Review

Recent scholarship characterizes contemporary menopause research through an increasingly multidisciplinary lens, focusing heavily on symptom management, hormonal transitions, and the psychosocial determinants of aging (4). Emerging research now prioritizes holistic and personalized management strategies, ranging from genetic and microbiome-based insights to innovative pharmacological and lifestyle interventions (5). Simultaneously, scholarly discourse is expanding to interrogate the commercial determinants of menopause and the impact of corporate political activity on healthcare regulation (6). Despite this thematic expansion, existing reviews often neglect marginalized populations, particularly the unique experiences of LGBTQ+ individuals, which remain critically under-examined within heteronormative research frameworks (7). Furthermore, menopause research frequently overlooks the intersectional influence of geographic and socio-economic disparities on global health outcomes, leaving a significant void in our understanding of how systemic resource allocation shapes health equity (8).

Materials and Methods

Protocol and Registration

This systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) statement guidelines. The protocol for this review was prospectively registered in the International Prospective Register of Systematic Reviews (PROSPERO) on October 11, 2026.

Eligibility Criteria

Studies were selected based on the Population, Intervention/Exposure, Comparator, Outcomes, and Study Design (PICOS) framework:

- Population (P): Adult women (≥ 40 years) categorized as perimenopausal (experiencing irregular menses or vasomotor symptoms per STRAW+10 criteria) or postmenopausal (defined as ≥ 12 consecutive months of spontaneous amenorrhea or following bilateral oophorectomy ± hysterectomy).
  Premenopausal women with regular menstrual cyclicity, pediatric/male cohorts, in vitro/animal models, and studies without segregated menopausal subcohort data were excluded.
- Intervention/Exposure (I): Natural or surgical menopausal transition (systemic hypoestrogenism) as an exposure, and/or pharmacological interventions including menopausal hormone therapy (MHT/HRT: systemic/local estrogens, combined estrogen-

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

progestin regimens, tissue-selective complexes), selective estrogen receptor modulators (SERMs), tibolone, and bone-preserving agents (bisphosphonates, RANKL inhibitors).

- Comparators (C): Placebo, untreated control populations, active non-hormonal comparators, or premenopausal baseline controls. Non-comparative longitudinal observational cohorts were also eligible.
- Outcomes (O):
    1. Musculoskeletal: Changes in bone mineral density (BMD) assessed via dual-energy X-ray absorptiometry (DXA) at lumbar spine, femoral neck, or total hip, and incidence of fragility fractures.
    2. Cardiometabolic & Hepatic: Incidence/prevalence of metabolic dysfunction-associated steatotic liver disease (MASLD / NAFLD) confirmed by imaging or validated fibrosis biomarkers (e.g., FIB-4), along with alterations in glycemic control and lipid subfractions.
    3. Oncological: Incident hazard or relative risks of hormone-dependent malignancies (invasive breast, endometrial, and ovarian cancers).
- Study Designs (S): Peer-reviewed original clinical investigations, including randomized controlled trials (RCTs), non-randomized prospective/retrospective cohort studies, case-control studies, and cross-sectional analyses. Narrative reviews, editorials, conference abstracts lacking full text, and commentaries were excluded.

Information Sources and Search Strategy

A comprehensive electronic literature search was executed using the Scopus database, indexing peer-reviewed records from January 1, 2022, through 2026. The search syntax combined MeSH-related keywords, title, abstract, and index terms using Boolean operators:

Plaintext

```
TITLE-ABS-KEY (menopause OR menopausal
OR postmenopause OR postmenopausal OR
perimenopause OR perimenopausal OR
climacteric)
AND PUBYEAR > 2021 AND PUBYEAR < 2026
AND (DOCTYPE (ar) OR DOCTYPE (re))
AND (LIMIT-TO (SRCTYPE, "j"))
AND (LIMIT-TO (PUBSTAGE, "final"))
AND (LIMIT-TO (EXACTKEYWORD, "Human"))
AND (LIMIT-TO (SUBJAREA, "MEDI"))
AND (LIMIT-TO (LANGUAGE, "English"))
```

Additionally, backward snowball citation searching of reference lists from retrieved landmark guidelines and seminal systematic reviews was manually conducted to identify relevant uncaptured records.

Study Selection and Data Extraction

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

All retrieved citations were exported to reference management software for systematic deduplication and subsequently imported into an online screening platform.

- Screening: Title and abstract screening was conducted independently by two reviewers against the predefined eligibility criteria. Full texts of potentially eligible articles were retrieved and scrutinized independently. Discrepancies were resolved through mutual consensus or adjudication by a third senior author.
- Data Extraction: A standardized data extraction form was utilized to retrieve study characteristics (first author, publication year, country, study design, sample size), participant demographics (mean age, menopausal status, surgical vs. natural menopause), intervention/exposure regimens, follow-up duration, and quantitative effect estimates (RRs, HRs, ORs, MDs/SMDs with 95% confidence intervals).

Risk of Bias and Quality Assessment

The methodological quality and risk of bias of the included observational studies (cohort and case-control) were appraised using the Newcastle-Ottawa Scale (NOS) (9), assessing patient selection, group comparability, and outcome ascertainment. For any randomized trials, the Cochrane Risk of Bias 2 (RoB 2) tool (9) was employed across five core domains. Quality assessments were performed independently by two reviewers, with discrepancies resolved through consensus.

Certainty of Evidence Assessment

The certainty of evidence across primary clinical outcomes (musculoskeletal, cardiometabolic, and oncological) was graded using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) framework (10). Two independent reviewers rated evidence across five domains: risk of bias, inconsistency, indirectness, imprecision, and publication bias. Certainty levels were categorized as high, moderate, low, or very low, and Summary of Findings (SoF) profiles were constructed.

Data Synthesis and Statistical Analysis

Where studies were clinically and methodologically homogeneous, quantitative synthesis (meta-analysis) was performed.

- Models & Effect Sizes: Random-effects models (DerSimonian-Laird or restricted maximum likelihood) were implemented to account for anticipated inter-study heterogeneity. Dichotomous and time-to-event outcomes were reported as pooled relative risks (RRs), odds ratios (ORs), or hazard ratios (HRs) with 95% confidence intervals (CIs). Continuous parameters (BMD changes, metabolic values) were synthesized using weighted mean differences (WMDs) or standardized mean differences (SMDs) with 95% CIs.
- Heterogeneity: Statistical heterogeneity was quantified using Cochran's Q test ($p<0.10$ considered statistically significant) and the I^2 statistic ($I^2>50\%$ indicating substantial heterogeneity).
- Narrative Synthesis: If clinical or statistical heterogeneity precluded quantitative pooling, findings were synthesized narratively following the Synthesis Without Meta-analysis (SWiM) guidelines, supported by structured tables and descriptive summaries.

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

Results

Annual Publication Trends and Temporal Dynamics

Between 2022 and 2026, a total of 17,195 eligible menopause-related publications were indexed in Scopus (Figure 1). Annual publication productivity remained consistently high throughout the study period, consistently surpassing 4,000 documents per year. The output comprised 4,241 publications (24.7%) in 2022, 4,015 publications (23.3%) in 2023, and 4,151 publications (24.1%) in 2024. A substantial acceleration in scientific productivity was observed in 2025, reaching a peak of 4,787 publications (27.8%), representing a 15.3% year-over-year increase compared to 2024. In addition, one publication (<0.1%) was indexed as an early access / in-press record for the 2026 indexing cycle (Figure 1).

Bibliometric Overview and Publication Dynamics

A total of 17,195 eligible publications met the inclusion criteria across the 2022–2026 indexing window. Original research articles represented the vast majority of the published literature (n=14,326, 83.31%), while narrative, systematic, and scoping reviews accounted for the remaining 16.69% (n=2,869).

Annual scientific output demonstrated sustained activity exceeding 4,000 publications per annum, with a marked acceleration in 2025. Specifically, publication volumes were distributed as follows:

- 4,241 documents (24.66%) in 2022,
- 4,015 documents (23.35%) in 2023,
- 4,151 documents (24.14%) in 2024,
- 4,787 documents (27.84%) in 2025, and
- 1 document (0.01%) indexed in early access for 2026.

Open access publishing models were predominant, with 12,274 documents (71.38%) published under open access frameworks. The hybrid and gold open access pathways combined with green repository archiving constituted the largest proportion of accessible literature (n=6,798).

Journal Distribution and Source Productivity

The retrieved manuscripts were published across diverse medical disciplines, encompassing gynecological endocrinology, oncology, bone metabolism, and general clinical medicine. Table 1 summarizes the top 10 most active journals in the field.

Citation Analysis and High-Impact Publications

The dataset accumulated a total of 202,187 citations, yielding a mean of 11.76±42.61 citations per document. The citation distribution exhibited right-skewness, with a median of 5 citations (interquartile range [IQR]: 2–11; range: 0–2,422).

Highly cited works were largely dominated by international clinical practice guidelines, consensus statements, and landmark epidemiological syntheses addressing multisystemic complications in postmenopausal populations. The top five most-cited records were:

1. Rinella et al. (2023) (11) in Hepatology: “AASLD Practice Guidance on the clinical assessment and management of nonalcoholic fatty liver disease” (2,422 citations).
2. Tacke et al. (2024) (12) in Journal of Hepatology: “EASL–EASD–EASO Clinical Practice Guidelines on the management of metabolic dysfunction-associated steatotic liver disease (MASLD)” (2,172 citations).

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

3. Becker et al. (2022) (13) in Human Reproduction Open: "ESHRE guideline: endometriosis" (1,553 citations).
4. Crosbie et al. (2022) (14) in The Lancet: "Endometrial cancer" (1,255 citations).
5. LeBoff et al. (2022) (15) in Osteoporosis International: "The clinician's guide to prevention and treatment of osteoporosis" (1,193 citations).

Thematic Focus and Keyword Profiling

Title and keyword frequency evaluations indicated that contemporary research revolves around four primary clinical clusters:

- Malignancy and Hormone-Dependent Cancers: Breast cancer emerged as the most investigated condition (n=3,033), followed by ovarian (n=1,239) and endometrial (n=710) cancers. Key research questions focused on the oncological safety of menopausal hormone therapy (MHT), estrogen receptor signaling, and postmenopausal malignancy risks.
- Bone Mineral Density and Fracture Prevention: Musculoskeletal deterioration, marked by osteopenia and osteoporosis, formed a major research pillar (osteoporosis: n=1,175; bone-related terms: n=1,278), with heavy emphasis on dual-energy X-ray absorptiometry (DXA) surveillance and antiresorptive therapeutics.
- Cardiometabolic Risk and Steatotic Liver Disease: Metabolic consequences of hypoestrogenism, including metabolic dysfunction-associated steatotic liver disease (MASLD), visceral adiposity, and cardiovascular comorbidities, represented a rapidly expanding research frontier.
- Evidence-Based Study Designs: High-level methodological frameworks constituted a prominent share of the literature, including systematic reviews (n=908), meta-analyses (n=748), prospective cohort studies (n=870), and randomized controlled trials (n=740).

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

Acta Medica Young Doctors
ISSN: 3108-4532
Volume 2 Issue E

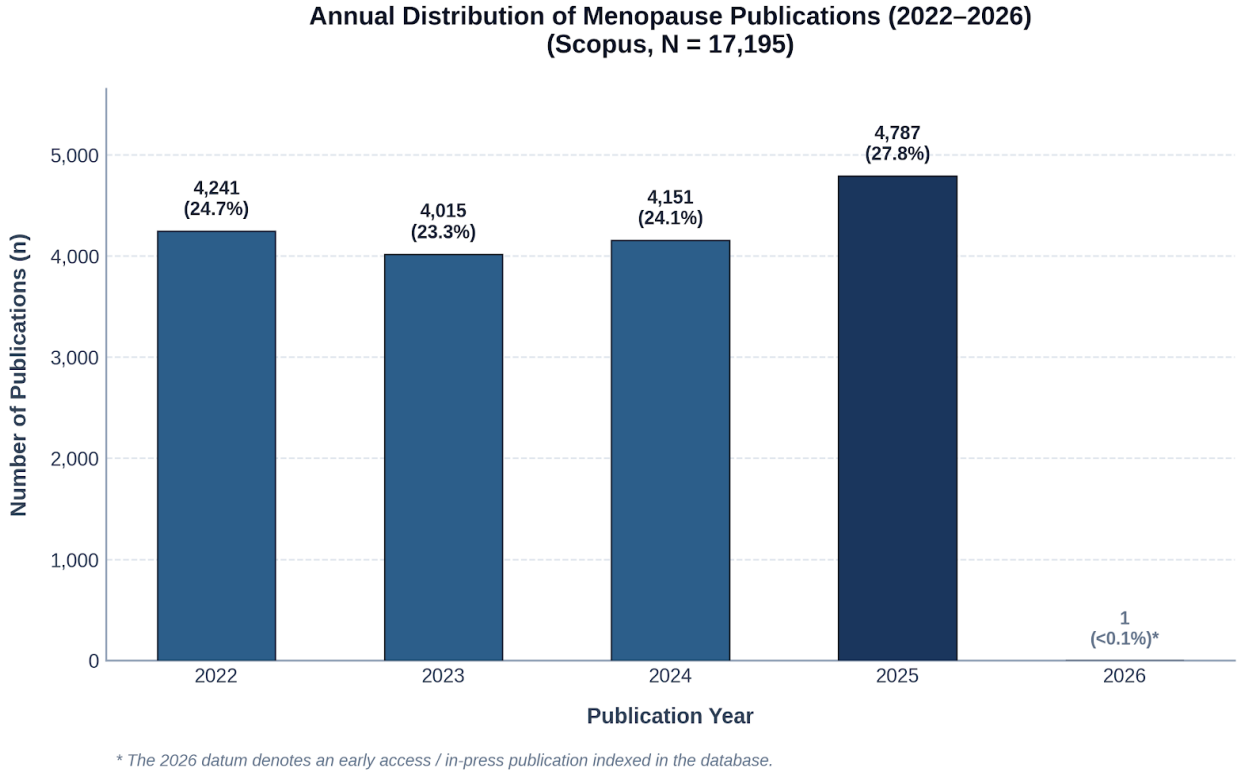

Figure 1. Annual distribution of menopause-related scientific publications indexed in Scopus between 2022 and 2026 (N=17,195). Absolute counts (n) and percentage proportions (%) are annotated above each corresponding bar. (The 2026 datum denotes an early access / in-press publication indexed in the database).

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

Table 1. Top 10 most productive journals publishing menopause-related research (2022–2026)

Journal Title	Record Count (n)	Share (%)
Menopause	546	3.18
Maturitas	300	1.74
Frontiers in Endocrinology	289	1.68
Climacteric	277	1.61
Journal of Clinical Medicine	269	1.56
BMC Women's Health	246	1.43
Frontiers in Oncology	246	1.43
Cancers	193	1.12
Medicine (United States)	180	1.05
Osteoporosis International	150	0.87

Field-specific specialty journals (Menopause, Maturitas, and Climacteric) accounted for 6.53% (n=1,123) of the entire corpus, while oncology-focused outlets (Frontiers in Oncology and Cancers) collectively contributed 439 articles.

Discussions

The findings of this bibliometric analysis demonstrate that menopause-related research has gained substantial momentum over the past five years, transitioning from a narrow focus on reproductive senescence to a comprehensive, multidisciplinary pillar of adult women's health. The sustained scientific output exceeding 4,000 publications annually between 2022 and 2024, coupled with a notable acceleration in 2025, reflects the escalating global public health priority placed on postmenopausal longevity and preventive medicine in aging populations. Clinical interest has clearly shifted away from viewing menopause merely as a transient phase characterized by vasomotor symptoms and genitourinary syndrome, evolving toward the long-term management of systemic cardiovascular, metabolic, and oncological sequelae.

Despite this thematic broadening, current scholarship remains predominantly focused on short-term symptom relief, with a notable deficit in longitudinal data addressing clinically meaningful geriatric endpoints such as incident osteoporotic fractures and type 2 diabetes (16). Furthermore, existing literature often treats menopausal women as a homogeneous cohort, failing to account for the diverse risk factors and individual biological variability that necessitate a shift toward precision medicine (17). Specifically, research must transcend the existing reliance on broad health indicators by integrating personalized interventions that consider individual variability in lifestyle, genetics, and sudomotor function (18,19). Moreover, current research frameworks must prioritize inclusivity by actively addressing the underrepresented needs of Indigenous and marginalized populations, who often face unique disparities in care access and symptom interpretation (20,21).

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

Thematic and keyword profiling revealed that hormone-sensitive malignancies—predominantly breast, ovarian, and endometrial cancers—represent the most extensively investigated clinical domain. This high concentration mirrors ongoing clinical debates regarding the oncological safety of menopausal hormone therapy (MHT), the refined risk-benefit ratios of individualized regimens, and the therapeutic potential of selective estrogen receptor modulators (SERMs). Concurrently, the heavy volume of research dedicated to bone mineral density (DXA screening) and osteoporosis reaffirms that fracture prophylaxis remains a fundamental public health imperative to preserve functional independence and reduce geriatric morbidity.

Conversely, emerging research clusters related to drug delivery systems and medication adherence strategies, which constitute emerging research frontiers for optimizing therapeutic outcomes (22). Furthermore, the scarcity of research investigating disparities in menopause care across low- and middle-income countries highlights an urgent need for more globally representative, equitable evidence (23). Bridging these gaps requires a systematic shift in policy, integrating menopause education into medical curricula to combat the clinician knowledge deficits and negative attitudes that currently impede service access (24,25). Furthermore, addressing these inequities necessitates a multifaceted approach that accounts for the intersectional sociodemographic and sociocultural factors influencing the menopause experience (8).

Remarkably, the most cited works within the corpus were international practice guidelines addressing metabolic dysfunction-associated steatotic liver disease (MASLD) and cardiometabolic comorbidities. This pattern underscores a profound paradigm shift: the loss of ovarian estrogen is increasingly recognized as a key trigger for visceral adiposity, hepatic steatosis, atherogenic dyslipidemia, and systemic insulin resistance. Consequently, menopause care has expanded far beyond conventional gynecology. This transition is further evidenced by journal distribution patterns, where high-output specialty periodicals such as Menopause, Maturitas, and Climacteric are complemented by oncology (Frontiers in Oncology, Cancers), endocrinology (Frontiers in Endocrinology), and multidisciplinary internal medicine journals.

Future academic inquiry must pivot toward the integration of these findings into clinical care pathways, standardizing multidisciplinary menopause support to address the complex needs of patients beyond endocrine management (26). Bridging this gap requires prioritizing the integration of menopause health into non-communicable disease frameworks, ensuring that patient education and clinician training adequately address both systemic physiological shifts and the sociocultural barriers to equitable care (27,28). Addressing these gaps demands the development of culturally sensitive, targeted educational initiatives that mitigate the systemic health inequalities currently hindering diverse communities (29). Furthermore, formalizing menopause pedagogy within mainstream health professional education is essential to rectifying pervasive knowledge gaps and fostering the expertise required to manage these multifaceted clinical presentations (30).

The finding that over 71% of the identified literature is published under open access frameworks highlights a favorable trajectory toward rapid dissemination of evidence-based clinical guidelines. Such open accessibility broadens the global uptake of findings and accelerates guideline translation into clinical practice (31).

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

Nonetheless, several methodological limitations should be acknowledged. The dataset was derived exclusively from the Scopus database, was restricted to English-language peer-reviewed articles and reviews, and omitted gray literature and non-indexed sources. Furthermore, the broad search syntax inevitably captured general cohort studies where postmenopausal status was evaluated as a subgroup variable rather than a sole primary endpoint. Future research should prioritize longitudinal metabolic profiling, machine-learning-driven individualized risk prediction, and multinational cohort validation to optimize personalized postmenopausal healthcare.

Conclusion

In conclusion, this bibliometric analysis highlights substantial scientific productivity and a significant paradigm shift in menopause-related research between 2022 and 2026. The findings demonstrate that menopause has evolved beyond the conventional scope of reproductive senescence and transient vasomotor symptom management into a comprehensive, multidisciplinary domain encompassing oncological surveillance, bone preservation, and long-term cardiometabolic risk mitigation—notably metabolic dysfunction-associated steatotic liver disease (MASLD).

The high proportion of open-access literature reflects a positive trend toward the rapid global dissemination of evidence-based clinical guidelines. Future research should prioritize precision medicine frameworks, focusing on individualized risk-benefit stratification for menopausal hormone therapy (MHT), early metabolic biomarker screening, and large-scale prospective longitudinal cohorts to optimize long-term postmenopausal healthcare outcomes.

Limitations

Several methodological limitations of this bibliometric study should be addressed. First, the data retrieval was restricted exclusively to the Scopus database; although Scopus provides extensive coverage of biomedical literature (32), relevant studies indexed solely in other major databases, such as PubMed/MEDLINE or Web of Science, were not captured. Second, language and document type filters were applied, limiting the corpus to English-language original articles and reviews, thereby excluding local-language epidemiological reports, conference proceedings, and gray literature. Third, due to the broad nature of the title-abstract-keyword search strategy, certain large-scale studies where postmenopausal status was examined as a demographic subgroup rather than the primary clinical endpoint were inevitably included. Finally, because of the short citation window inherent in analyzing the recent 2022–2026 period, citation counts for newly published manuscripts (notably from 2024 to 2025) remain subject to time-lag bias and may not yet reflect their long-term scientific impact (33).

Acknowledge

Cite: Canbaba, Z. U. (2026). Global Research Trends in Menopause: A Scopus-Based Bibliometric and Science Mapping Analysis, 2021–2025. Acta Medica Young Doctors, 2(4), 159–171.

References

1. Jin Z, Tian C, Kang M, Hu S, Zhao L, Zhang M. The 100 top-cited articles in menopausal syndrome: a bibliometric analysis. Reproductive Health [Internet]. 2024 Apr 8 [cited 2026 Feb];21(1):47. Available from: https://doi.org/10.1186/s12978-024-01770-9

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

2. Sarasati B, Setiasih, Sukamto ME. Trends on Study of Women During Menopausal Transition. ANIMA Indonesian Psychological Journal [Internet]. 2024 July 31 [cited 2025 Nov];39(2). Available from: https://doi.org/10.24123/aipj.v39i2.6263

3. Li J, Wei Z, Wu J, Min K, Li X, Yao Y, et al. Trends in research related to menopausal hormone therapy from 2000 to 2021: A bibliometric analysis. Frontiers in Medicine [Internet]. 2022 Oct 28 [cited 2026 Jan];9:952487. Available from: https://doi.org/10.3389/fmed.2022.952487

4. BALMUMCU A. Investigation of Trends in Research on Menopausal Symptoms: A Descriptive Study. Turkiye Klinikleri Journal of Health Sciences [Internet]. 2025 Jan 1 [cited 2025 Nov];10(3):792–802. Available from: https://doi.org/10.5336/healthsci.2025-108996

5. Srinivasan B. The Impact of Menopause on Women\'s Health: A Review of Recent Research. SDES-International Journal of Interdisciplinary Research [Internet]. 2024 Nov 8 [cited 2026 Mar];5(5):844–7. Available from: https://doi.org/10.47997/sdes-ijir/5.5.2024-844-847

6. Thomas S, Randle M, White SL. (Re)framing menopause: a comprehensive public health approach. Health Promotion International [Internet]. 2024 May 28 [cited 2026 May];39(3). Available from: https://doi.org/10.1093/heapro/daae052

7. Westwood S. Lesbian, gay, bisexual, transgender and queer (LGBTQ+) menopause: Literature review, knowledge gaps and research agenda. Health An Interdisciplinary Journal for the Social Study of Health Illness and Medicine [Internet]. 2024 Aug 8 [cited 2025 Nov];29(4):468–88. Available from: https://doi.org/10.1177/13634593241270923

8. Peate M, Johnson TL, Avis NE, Hickey M. Addressing sociodemographic, socioeconomic, and gendered disparities for equity in menopause care. Cell Reports Medicine [Internet]. 2024 June 1 [cited 2026 Mar];5(6):101616. Available from: https://doi.org/10.1016/j.xcrm.2024.101616

9. Mathew JL. Systematic Reviews and Meta-Analysis: A Guide for Beginners. Indian Pediatrics [Internet]. 2021 June 28 [cited 2025 Nov];59(4):320–30. Available from: https://doi.org/10.1007/s13312-022-2500-y

10. Guyatt G, Wang Y, Eachempati P, Iorio A, Murad MH, Hultcrantz M, et al. Core GRADE 4: rating certainty of evidence—risk of bias, publication bias, and reasons for rating up certainty. BMJ [Internet]. 2025 May 13 [cited 2026 June];389. Available from: https://doi.org/10.1136/bmj-2024-083864

11. Rinella ME, Neuschwander-Tetri BA, Siddiqui MS, Abdelmalek MF, Caldwell SH, Barb D, et al. AASLD Practice Guidance on the clinical assessment and management of nonalcoholic fatty liver disease. PubMed Central [Internet]. 2023 Feb 2 [cited 2025 Nov];77(5):1797–835. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/10735173

12. Tacke F, Horn P, Wong VW, Ratziu V, Bugianesi E, Francque S, et al. EASL–EASD–EASO Clinical Practice Guidelines on the management of metabolic dysfunction-associated steatotic liver disease (MASLD): Executive Summary. Diabetologia [Internet]. 2024 June 13 [cited 2026 Mar];67(11):2375–92. Available from: https://doi.org/10.1007/s00125-024-06196-3

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

13. Becker CM, Bokor A, Heikinheimo O, Horne AW, Jansen F, Kiesel L, et al. ESHRE guideline: endometriosis. Human Reproduction Open [Internet]. 2022 Jan 1 [cited 2026 Oct];2022(2). Available from: https://doi.org/10.1093/hropen/hoac009

14. Baker-Rand H, Kitson S. Recent Advances in Endometrial Cancer Prevention, Early Diagnosis and Treatment. Cancers [Internet]. 2024 Mar 1 [cited 2025 Dec];16(5):1028. Available from: https://doi.org/10.3390/cancers16051028

15. LeBoff MS, Greenspan SL, Insogna K, Lewiecki EM, Saag KG, Singer A, et al. The clinician's guide to prevention and treatment of osteoporosis. Osteoporosis International [Internet]. 2022 Apr 28 [cited 2026 Mar];33(10):2049–102. Available from: https://doi.org/10.1007/s00198-021-05900-y

16. Xie J, Zhao M, Zhan H, Jiang X, Yu C, Rao Z, et al. Optimizing the Management of Menopause-Related Chronic Diseases in Rural Settings: A Closed-Loop "Screening-Prevention-Treatment" Model to Promote Healthy Aging – A Descriptive Study. International Journal of Women s Health [Internet]. 2026 June 1 [cited 2026 June];1–10. Available from: https://doi.org/10.2147/ijwh.s614939

17. Wattar BHA, Rogozińska E, Vale CL, Fisher DJ, Petersen I, Nicum S, et al. Effectiveness and safety of menopause treatments: pitfalls of available evidence and future research need. Climacteric [Internet]. 2024 Jan 26 [cited 2025 Nov];27(2):154–8. Available from: https://doi.org/10.1080/13697137.2023.2297880

18. Roberts KA, Low DA, O'Donnell E. Editorial: Exercise and menopause: benefits, challenges and the transition to optimal management. Frontiers in Sports and Active Living [Internet]. 2026 Feb 26 [cited 2026 Mar];8:1798453. Available from: https://doi.org/10.3389/fspor.2026.1798453

19. De P, Haque SM. Recent Trends and Techniques in Monitoring Menopausal Transition. In: Advances in medical technologies and clinical practice book series [Internet]. IGI Global; 2024 [cited 2025 Dec]. p. 93–123. Available from: http://dx.doi.org/10.4018/979-8-3693-2342-7.ch004

20. Delanerolle G, Phiri P, Elneil S, Talaulikar V, Eleje GU, Kareem R, et al. Menopause: a global health and wellbeing issue that needs urgent attention. University of Birmingham Research Portal (University of Birmingham) [Internet]. 2024 Dec 18 [cited 2026 Jan];13(2). Available from: https://research.birmingham.ac.uk/en/publications/fa13e8f0-8855-4b4f-94d6-735af7a64f5e

21. Kent-Marvick J, Taylor-Swanson L, Howes L, Hsu PY, Austin S, Aderibigbe T, et al. Indigenous, integrative, and biomedical perimenopause and postmenopause healthcare for Indigenous midlife peoples residing in the United States and Canada: A scoping review. medRxiv [Internet]. 2025 July 11 [cited 2026 Mar]; Available from: https://doi.org/10.1101/2025.07.10.25331221

22. Zhou X, Xiong H, Hu D. A bibliometric analysis of the current state and future directions of osteoporosis pharmacological treatment. Frontiers in Medicine [Internet]. 2025 Sept 24 [cited 2026 Jan];12:1622425. Available from: https://doi.org/10.3389/fmed.2025.1622425

23. Talaulikar V, Takhar J. Menopause in transition: science, equity, and the future of care. In 2025 [cited 2025 Nov]. p. 152–8.

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149

Available from: https://doi.org/10.4324/9781003658665-8

24. Davis SR, Magraith K. Advancing menopause care in Australia: barriers and opportunities. The Medical Journal of Australia [Internet]. 2023 May 23 [cited 2025 Dec];218(11):500–2. Available from: https://doi.org/10.5694/mja2.51981

25. Martin-Key NA, Funnell EL, Bahn S. Treatment provision and management for the menopause: a multinational survey study. Frontiers in Global Women s Health [Internet]. 2025 Nov 3 [cited 2026 June];6:1638428. Available from: https://doi.org/10.3389/fgwh.2025.1638428

26. Cronin C, Donevant S, Hughes KA, Kaunonen M, Marcussen J, Wilson R. Reflecting through menopause: introducing the MIRROR cycle to support reflection during the menopause transition. Journal of research in nursing [Internet]. 2026 June 5 [cited 2026 June]; Available from: https://doi.org/10.1177/17449871261446828

27. Aninye IO, Laitner MH, Chinnappan S. Menopause preparedness: perspectives for patient, provider, and policymaker consideration. Menopause The Journal of The North American Menopause Society [Internet]. 2021 June 28 [cited 2025 Nov];28(10):1186–91. Available from: https://doi.org/10.1097/gme.0000000000001819

28. Islam RM, Rana J, Katha S, Hossain MdA, Salekin SU, Chowdhury AT, et al. Menopause in low and middle-income countries: a scoping review of knowledge, symptoms and management. Climacteric [Internet]. 2025 May 4 [cited 2025 Nov];28(3):242–79. Available from: https://doi.org/10.1080/13697137.2025.2509254

29. Mann C, Shah L, Eccles A, Keating S, Dale J, Apenteng P, et al. Menopause care for diverse communities: a qualitative study of GP clinician experiences. British Journal of General Practice [Internet]. 2025 June 6 [cited 2026 Jan];75(761). Available from: https://doi.org/10.3399/bjgp.2024.0780

30. Macpherson B, Quinton N. Menopause and healthcare professional education: A scoping review. Maturitas [Internet]. 2022 Aug 27 [cited 2026 Jan];166:89–95. Available from: https://doi.org/10.1016/j.maturitas.2022.08.009

31. Cawthorpe D. Predicting the Probability That Open-Access Clinical Literature Saves Lives. Qeios [Internet]. 2025 Nov 17 [cited 2026 Mar]; Available from: https://doi.org/10.32388/u2syir

32. Singh VK, Singh P, Karmakar M, Leta J, Mayr P. The journal coverage of Web of Science, Scopus and Dimensions: A comparative analysis. arXiv (Cornell University) [Internet]. 2021 Mar 26 [cited 2026 Mar];126(6):5113–42. Available from: http://arxiv.org/abs/2011.00223

33. Park G, Yi S. Prediction of high-impact research: a historical review and research opportunities. Scientometrics [Internet]. 2026 May 29 [cited 2026 May]; Available from: https://doi.org/10.1007/s11192-026-05660-8

Corresponding: Zeynel Umut Canbaba, Department of Obstetrics and Gynecology, Muş Malazgirt State Hospital, Muş, Türkiye, zcanbaba@hotmail.com
Doi: 10.66288/actamedi.2026.149