To Continue or to Discontinue, That Is the Question: A Review of the Current Landscape of Disease-Modifying Therapy Continuation, De-Escalation, and Discontinuation In Older Adults with Multiple Sclerosis

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Introduction

- Over half of people living with multiple sclerosis (MS) are now over age 55, yet they've been largely excluded from disease modifying treatment (DMT) research and the interpretation of evidence informing care.
- In addition, the input and lived experiences of older adults with MS severely lacking.
- This is a significant problem because older adults with MS face unique challenges like comorbidities, immunosenescence, polypharmacy, and higher risk of medication side effects, making treatment decisions especially complex.
- Older patients with MS with stable disease activity and clinicians are increasingly faced with decisions regarding DMT continuation, de-escalation, or discontinuation without adequate guidance from empirical literature.
- Without relevant data, older adults and their care teams often make decisions amid uncertainty.

Objective

- To conduct a multi-stakeholder landscape review of randomized, observational, and real-world evidence addressing the safety and clinical outcomes of DMT continuation, de-escalation, and discontinuation in older adults with MS, with emphasis on therapy-specific risk, disease activity, clinical applicability, and indiviudalized decision-making.

Methods

An expert targeted literature search was conducted using publicly available search engines (e.g., PubMed, Embase) between December 2025 - May 2026

Keywords specific to multiple sclerosis, aging or older adults, and DMTs were used in all searches and to identify real-world data.

Inclusion criteria: focus on older/aging adults with MS; focus on DMT treatment continuation, de-esclalation, discontinuation; empirical, review, or meta-analysis articles; real-world data; resource documents or guidelines.

Data were extracted from two independent reviewers- one who identified as a person with MS or stakeholder and another who identified as a researcher. Key elements of each data source were extracted and synthesized.

Results

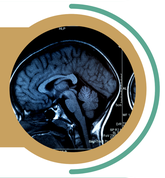
The landscape review identified a diverse body of evidence addressing aging, de-escalation, discontinuation, and safety of DMTs in MS. Sources included 26 empirical research studies, 9 review or commentary articles, 11 RWE studies, 1 formal clinical guideline, 10 conference posters/presentations/abstracts, and several expert opinion, news/media, and educational sources.

THEME 1 - RELAPSE RISK IS LOW IN STABLE OLDER ADULTS

Across studies, especially DISCO-MS, clinical relapses are rare in both those who continue and those who discontinue disease-modifying therapies (DMTs).

THEME 2 - MRI ACTIVITY DRIVES DIFFERENCES—NOT CLINICAL OUTCOMES

Most differences seen after discontinuation are small, subclinical, and detected only on MRI, without clear association with disability or symptoms. However, it is difficult to determine whether MRI lesions may have long-term effects on disability.

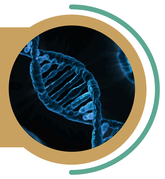


THEME 3 - RELAPSE OR DISEASE PROGRESSION RISK VARIES SIGNIFICANTLY BY DMT CLASS

Risks associated with DMT discontinuation vary across DMT type, with higher risk observed in some treatments and lower or less clear risk in others. This reinforces that treatment decisions cannot be generalized.

THEME 4 - AGE AND DISEASE BIOLOGY MATTER

Age plays a critical role in disease biology and disease stability alone is not sufficient to determine the risk of DMT changes in older adults. There is also evidence that age at treatment initiation may influence long-term outcomes.



THEME 5- THE RISK–BENEFIT BALANCE SHIFTS WITH AGING

Benefits of DMTs decrease over time, while risks of DMT-related adverse effects may increase, fundamentally changing the treatment equation. People living with MS emphasize comorbidities, caregiver burden, and independence. Clinicians and researchers note the lack of standardized frameworks and highlight overlooked factors such as medication convenience and tolerability.

THEME 6 - CONTINUED TREATMENT STILL MATTERS FOR SOME PEOPLE

Continued treatment may reduce healthcare utilization in individuals with ongoing disease activity. People living with MS described confusion due to conflicting advice and emphasized the emotional burden of uncertainty. Clinicians and researchers acknowledged the lack of predictive tools and reliance on clinical judgment.

THEME 7 - THIS IS NOT A BINARY DECISION

The literature supports a spectrum of options, including continuation, de-escalation, and discontinuation. People living with MS emphasized the importance of flexibility and the ability to revisit decisions.

Key Takeaways

There is no single correct approach to DMT management in older adults with MS. In addition, the "average patient problem" creates major gaps in current findings.

Evidence is population-based and incomplete, while decisions are individualized and value-driven. Also, cultural considerations and diverse populations/perspectives are not considered.

The goal is not to provide a single answer, but to equip individuals with the tools, context, and confidence to make and revisit decisions over time.

Conclusion

- To date, evidence supports a shift from uniform DMT strategies toward individualized, aging-related, and risk-stratified decision-making in older adults with MS.
- Evidence is emerging that supports the discontinuation of DMTs in selected stable older adults with MS, while complementary real-world evidence underscores the importance of DMT class, disease activity, and comorbidity burden.
- These findings inform a pragmatic clinical framework emphasizing reevaluation of the risk-benefit profile of treatments, structured monitoring, heterogeneity in patient presentation, cultural considerations, and tailored treatment adjustment in later-life MS care.
- They also reinforce the importance of incorporating lived experience, patient priorities, and shared decision-making into later-life MS care, particularly in areas where evidence remains limited.

Scan the QR code for citations and contact information

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