Macedonian Pharmaceutical Bulletin, 72 (Suppl 1) 533 - 534 (2026)
Online ISSN: 1857-8969
DOI: 10.33320/maced.pharm.bull.2026.72.03.257
Short communication

The role of the clinical pharmacist in the transition from intravenous to subcutaneous Ocrelizumab in patients with Multiple Sclerosis

Branka Pashaliska Cvetkov[1*], Tatjana Boshkova Petkovska[1], Gordana Dimeska[1], Coskun Kerala[1,2]

[1]*PHO University Clinic of Neurology - Skopje, St. Majka Tereza No. 17, 1000 Skopje, North Macedonia*
[2]*Medical Faculty, Ss. Cyril and Methodius University in Skopje, 1000 Skopje, North Macedonia*

Introduction

Ocrelizumab (OCREVUS®) is a widely used disease-modifying therapy for approved for the treatment of adults with relapsing forms of multiple sclerosis (RMS)—including clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease—as well as primary progressive multiple sclerosis (PPMS) (Flynn et al., 2026). The recent registration of the subcutaneous (SC) formulation in North Macedonia represents an important advancement in MS treatment, offering shorter 10-minute administration times and improved healthcare resource utilization compared with the intravenous (IV) formulation. In our neurology clinic, approximately 150 MS patients were transitioned from IV to SC ocrelizumab over the past year (MALMED, 2026; Roche.mk, 2025; University Clinic of Neurology Skopje, 2026). This transition required multidisciplinary coordination, with pharmacist playing a central role in patient counseling, safety management, treatment optimization, and healthcare system organization. The objective of this abstract is to present the role and contribution of the clinical pharmacist during the transition from intravenous to subcutaneous ocrelizumab in patients with multiple sclerosis.

Materials and Methods

A retrospective observational analysis was conducted at the neurology clinic during the first year following the implementation of SC ocrelizumab. Data were collected from 93 MS patients switched from the IV to the SC formulation. The pharmacist's activities included patient education regarding treatment administration and potential adverse events, assessment of drug-drug interactions in patients with comorbidities, preparation and optimization of premedication protocol, and monitoring and management of side effects.

Results and discussion

The transition from IV to SC ocrelizumab significantly reduced administration time and improved treatment workflow within the neurology clinic. A subset of 93 transitioned patients (mean age 41.5 years; 53.8% female; 46.2% relapsing MS, 30.1% PPMS) participated in a patient-reported outcome evaluation. Highlighting the critical impact of pharmacist-led counseling, 100% of participants felt adequately informed prior to the transition.

*brans_pa@yahoo.com

Patient-reported outcomes demonstrated exceptionally high satisfaction with the SC method: 91.2% rated their overall experience as "better" or "much better" compared to IV infusions, 86% reported significantly reduced hospital time, and 95.7% agreed that SC administration increased their sense of independence and control over their time. Consequently, 92.4% of participants preferred to continue with the SC formulation, citing reduced hospital time (81.3%) as the primary driver.

From a safety perspective, individualized pharmacological assessments and premedication optimization by the pharmacist contributed to the successful management of injection-related and systemic reactions, particularly in patients with multiple comorbidities. This structured transition successfully reduced the burden on infusion capacities and increased operational efficiency within the healthcare system.

Conclusion

The implementation of subcutaneous ocrelizumab represents an important advancement in MS treatment delivery. The clinical pharmacist plays a key role in ensuring a safe transition, patient education, adverse event management, and multidisciplinary coordination. Its contribution extends beyond medication dispensing to include active participation in treatment optimization and patient-centric care, directly translating into high patient satisfaction and improved hospital workflows.

References

Flynn, J.P., Gerriets, V., 2026. Ocrelizumab, In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK547750/. Accessed: May 2026.

Roche.mk website, 2025. OCREVUS за поткожна администрација е одобрен од МАЛМЕД, како прва и единствена инјекција која се дава двапати годишно за третман на релапсна форма и примарно прогресивна мултипла склероза, https://www.roche.mk/vesti/ocrevus-za-potkozhna-administracija-e-odobren-od-malmed-kako-prva-i-edinstvena-injekcija. Accessed: May 2026.

MALMED, 2026. Summary of Product Characteristics of OCREVUS (ocrelizumab) 920 mg. Agency for Medicines and Medical Devices of the Republic of North Macedonia. https://lekovi.zdravstvo.gov.mk/drugsregister.detaileddrugsregistercomponent:downloadguide/4431186537?t:ac=detailview/4431186537. Accessed May 2026.

University Clinic of Neurology, Skopje, 2026. Institutional source on OCREVUS SC use/availability in patients with multiple sclerosis. University Clinic of Neurology, Skopje, North Macedonia. Personal communication/source data, May 2026.