Physicians' reason for DMT choice and unmet need in US patients with nonactive PPMS

Short title: Unmet treatment need in nonactive PPMS

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Introduction: Information is limited about physicians' rationale behind disease-modifying therapy (DMT) choices and current unmet need in patients with nonactive primary progressive multiple sclerosis (PPMS).

Aim: To understand physicians' reasons for selecting DMTs and unmet need in US patients with nonactive PPMS.

Methods: The Adelphi Disease Specific Programme was used to identify US patients with nonactive PPMS from 2016–2021. In this annual cross-sectional survey, physicians reported current DMT, reasons for selection, issues with and areas for improvement.

Results: Among 1047 patients with nonactive PPMS, 43% were not currently on a DMT. Of those on a DMT (n=597), treatments included 43% infusions, 25% orals, and 28% injectables. Patients currently on a DMT without a previous treatment (n=279) included 37% infusions, 18% orals, and 41% injectables. Treatment-experienced patients (n=305) included 49% infusions, 32% orals, and 16% injectables. Physicians selected DMTs mainly for effectiveness (89–99%), driven by slowing disease progression (61–81%), administration (51–77%), safety/tolerability (45–60%), and quality of life (20–38%); insurance/ cost had little influence (<10%). Lack of DMT effectiveness was reported as an issue in 8% of patients on infusions, 13% on orals, and 19% on injectables. Among patients on infusions, orals, and injectables, safety and side effects were issues for 22%, 20%, and 27%, respectively; insurance/cost were issues for 11%, 3%, and 3%, respectively. Reported areas of DMT improvement included: effectiveness (80–83%), particularly disease progression (47% infusions, 45% orals, 53% injectables); safety and tolerability (36% infusions, 39% orals, 34% injectables); administration (14% infusions, 8% orals, 29% injectables [mainly frequency/disruption]); cost effectiveness (10% infusions, 14% orals, 7% injectables); and quality of life/insurance (6–9%).

Conclusion: A high unmet need remains for effective and safe treatments for patients with nonactive PPMS, as there is only one approved US treatment with limited efficacy in nonactive disease.

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