Documents

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Prediction of relapse activity when switching to cladribine for multiple sclerosis

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Abstract
Background: Patients with relapsing–remitting multiple sclerosis commonly switch between disease-modifying therapies (DMTs). Identifying predictors of relapse when switching could improve outcomes. Objective: To determine predictors of relapse hazard when switching to cladribine. Methods: Data of patients who switched to cladribine, grouped by prior disease-modifying therapy (pDMT; interferon-β/glatiramer acetate, dimethyl fumarate, teriflunomide, fingolimod or natalizumab (NTZ)), were extracted from the MSBase Registry. Predictors of relapse hazard during the treatment gap and the first year of cladribine therapy were determined. Results: Of 513 patients, 22 relapsed during the treatment gap, and 38 within 1 year of starting cladribine. Relapse in the year before pDMT cessation predicted treatment gap relapse hazard (hazard ratio (HR) = 2.43, 95% confidence interval (CI) = 1.03–5.71). After multivariable adjustment, relapse hazard on cladribine was predicted by relapse before pDMT cessation (HR = 2.00, 95% CI = 1.01–4.02), treatment gap relapse (HR = 6.18, 95% confidence interval (CI) = 2.65–14.41), switch from NTZ (HR compared to injectable therapies 4.08, 95% CI = 1.35–12.33) and age at cladribine start (HR = 0.96, 95% CI = 0.91–0.99). Conclusion: Relapse during or prior to the treatment gap, and younger age, are of prognostic relevance in the year after switching to cladribine. Switching from NTZ is also independently associated with greater relapse hazard. © The Author(s), 2022.

Author Keywords
cladribine; Disease-modifying therapies; outcome measurement; second-line treatment

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