Effect of Longer-term Ofatumumab Treatment on Disability Progression and Brain Volume Change

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BACKGROUND

In the ASCLEPIOS I/II core studies, ofatumumab (3-/6-month[m] confirmed disability worsening [CDW]: 10.90%/8.15%) delayed disability accrual compared with teriflunomide (3/6mCDW: 14.98%/11.95%). Progression independent of relapse activity (PIRA) was the main contributor to overall 3m/6mCDW.

OBJECTIVE

To assess CDW, PIRA, relapse-associated worsening (RAW), and brain volume change (BVC) in relapsing multiple sclerosis patients receiving ofatumumab for up to 5 years.

METHODS

Results are presented in this abstract for up to 4 years (ASCLEPIOS + ALITHIOS open-label extension) in patients on continuous ofatumumab and those switched from teriflunomide in the extension (full analysis set); 5-year data will be available at congress. The core period includes all data collected before the first dose in the extension (including core follow-up and extension screening). 6mCDW, PIRA (CDW events without confirmed relapses prior to CDW), RAW (event onset <90 days from a relapse), and BVC (percent brain volume change [PBVC] and annualized rates of change in brain volume [ABVC]) were assessed.

RESULTS

Of 1882 patients randomized in ASCLEPIOS I/II (ofatumumab/teriflunomide:946/936), 1367 entered ALITHIOS (continuous/switch:690/677). Most patients were free from 3m/6mCDW

This study was funded by Novartis Pharma AG, Basel, Switzerland

events during the studies (ofatumumab: 85.0%; teriflunomide: 80.7%). Up to 4 years (cut off: 25-Sep-2021), 119/944 (12.6%) and 148/932 (15.9%) patients had 6mCDW in the continuous and switch groups, respectively. In the continuous group, the 6mPIRA Kaplan-Meier cumulative event rate [KM-CER] remained low (11.0%) and 6mPIRA accounted for the majority of patients, i.e., 86/119 (72.3%; core:65.9%; extension:92.9%) whereas 6mRAW (KM-CER: 3.5%) accounted for only 30/119 (25.2%) patients (core:30.8%; extension:7.1%). Up to 4 years, overall mean PBVC remained low, –1.42% and –1.62% for the continuous and switch groups, respectively (at week 240). ABVC for continuous ofatumumab remained low in the core (–0.34%/year) and extension (–0.28%/year). In the switch group, ABVC was –0.42%/year(core) and –0.29%/year(extension).

CONCLUSIONS

With longer-term ofatumumab treatment, disability worsening was predominantly PIRA, the annual rate of BVC remained low, and low rates of CDW/PIRA indicated that most patients remained free from disease progression. Outcomes favored early, compared with later, initiation with ofatumumab.

Key words: Ofatumumab, PIRA, longer-term

Character count: 2,355/2,500 characters (including spaces and excluding headings)

DISCLOSURES:

Author disclosures

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This study was funded by Novartis Pharma AG, Basel, Switzerland