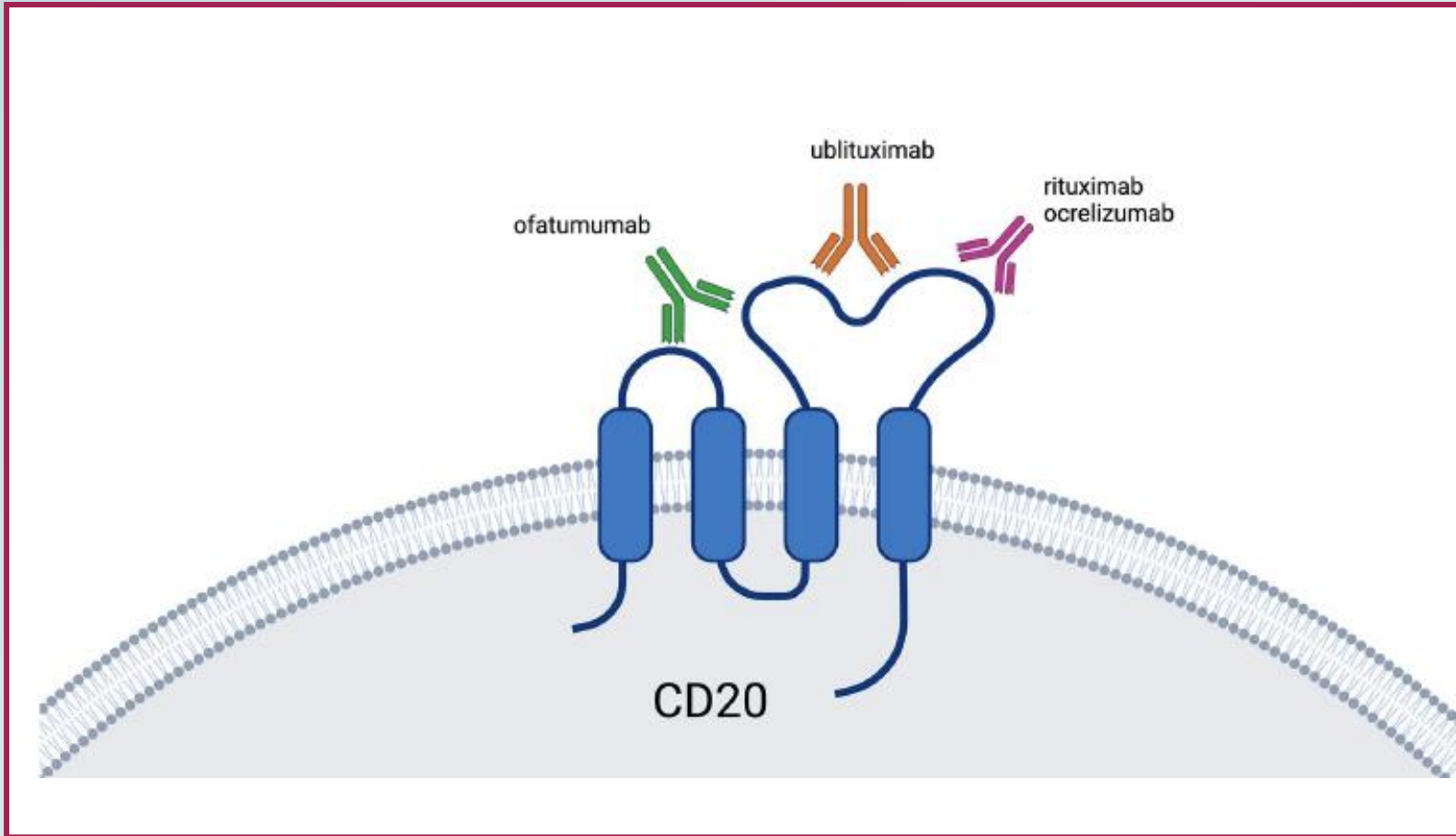


Ocrelizumab Binds to CD20 Surface Antigen of B Cells



- Binds to same epitope as rituximab
- Leads to **depletion** of CD20-expressing B cells
- Approved for treatment for **RRMS, active SPMS, and PPMS**

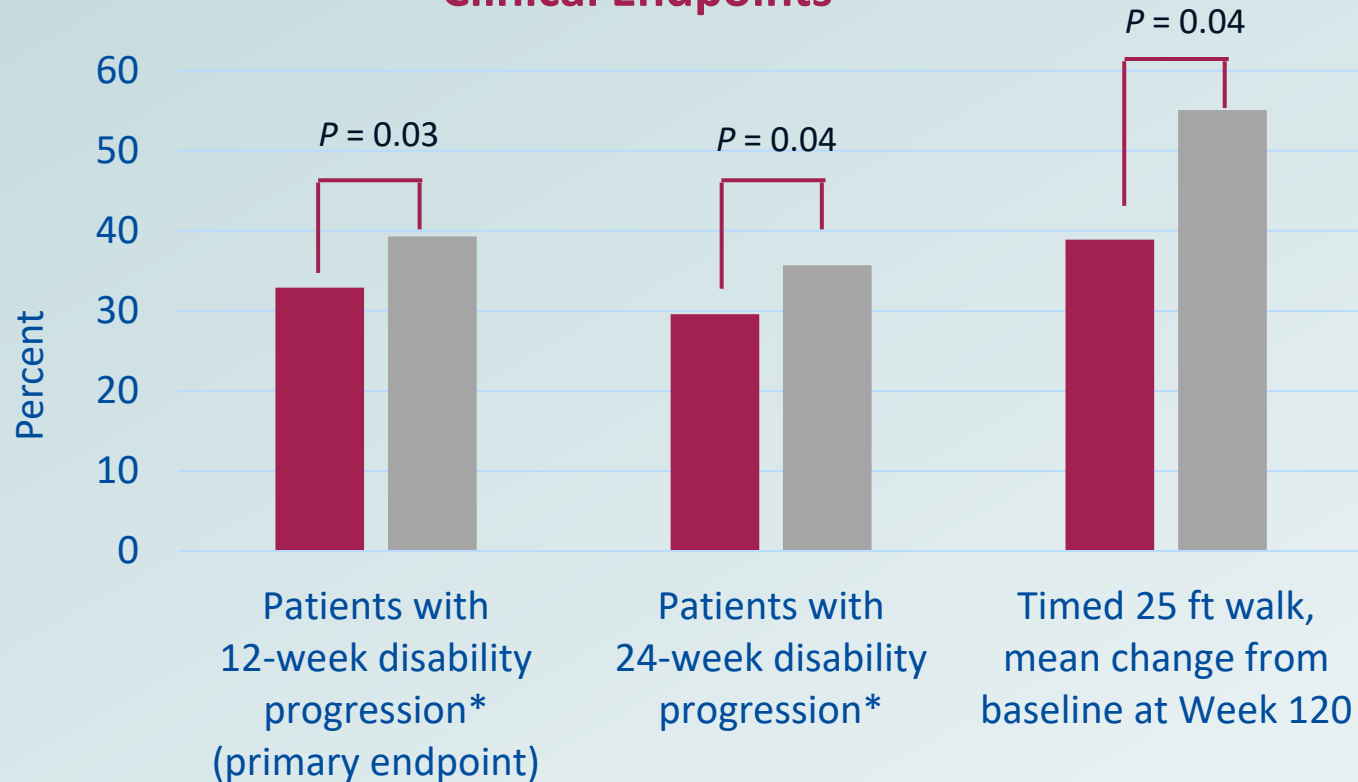
PPMS, primary progressive multiple sclerosis; RRMS, relapsing-remitting multiple sclerosis; SPMS, secondary progressive multiple sclerosis.

Bar-Or A et al. *CNS Drugs*. 2021;35:985-997.

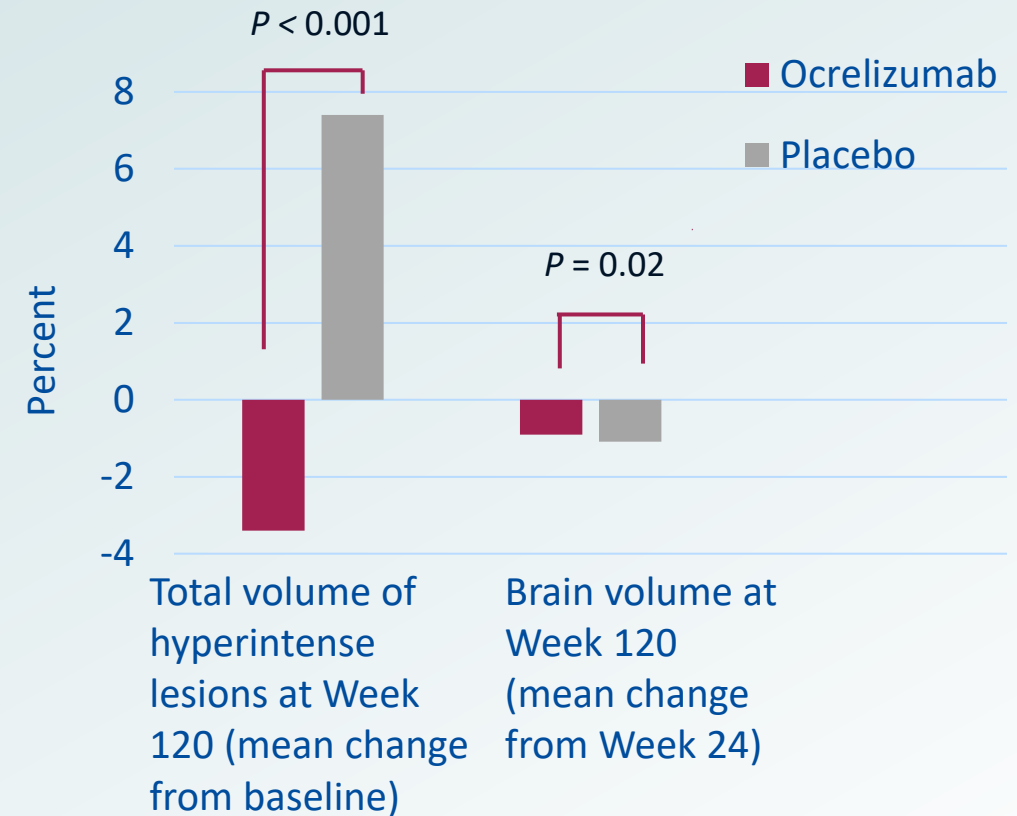
Illustration adapted from Stathopoulos P et al. *Neurotherapeutics*. 2022;19:691-710. Copyright© 2022 by the authors ([CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)).

Ocrelizumab Efficacy in PPMS: Results from Phase 3 Placebo-Controlled Trial

Clinical Endpoints



MRI Endpoints



*Percentage of patients with sustained increase in EDSS score of ≥ 1 point. EDSS, Expanded Disability Status Scale; PPMS, primary progressive multiple sclerosis. Montalban X et al. *N Engl J Med*. 2017;376:209-220.

Ocrelizumab Safety: 7-Year Safety Analysis

Combined analysis of patients who received ocrelizumab in any clinical trial and open label extension, for up to 7 years.

Low Discontinuation Rates

- Discontinuation due to AEs – 3.19%
- Comparable to placebo – 3.35%
- Most common reasons
 - Malignancies
 - Infusion-related reactions
 - Infections

Infusion Related Reactions

- Majority mild to moderate
- Decreased with number of infusions
- Managed with premedication, adjusting infusion rates, and symptomatic treatment

Serious Infections

- Numerically lower with ocrelizumab than control
- Rates stable over time
- Differential effect on innate and adaptive immune system
 - Innate – limited effect
 - Neutrophil change transient, no increased rate of neutropenia
 - Little change in levels of NK cells
 - Adaptive – greater effect
 - Initial decrease in lymphocytes, maintained over time
 - Decreased IgG levels

Malignancy (including female breast cancer)

- No increased risk compared with matched MS and general populations
- Includes data from clinical trial population and postmarketing surveillance