Treatment Patterns and Therapy Selection Drivers Comparison between Anti-CD20 Agents Among Multiple Sclerosis Patients Who Recently Switched Disease-Modifying Therapies

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Background

With the recent approval of ofatumumab (OFA), physicians and patients have additional options when selecting an anti-CD20 disease-modifying therapy (DMT) for the treatment of multiple sclerosis (MS).

Objective

To compare switch treatment patterns and therapy selection decisions between DMTs with anti-CD20 mechanism of action (MOA).

Methods

233 US neurologists completed a survey and provided cross-sectional chart data from January 28th to March 1st, 2021, on MS patients who switched to a new DMT within the prior 3 months. Analyses focused on switches to ocrelizumab (OCR; n=144), OFA (n=47), and branded or biosimilar rituximab (RTX; n=41).

Results

The majority of switches to OCR (65%) and RTX (63%) were from first-line DMTs; switches to OFA were commonly from first- or second-line DMTs (43% and 49%, respectively) (Fig. 1).

Patients switching to RTX frequently came from a generic DMT (29%) or interferon (29%) (Fig. 2a; 2b). Half of switches to OCR were from an oral DMT, most often dimethyl fumarate (23%) or fingolimod (15%). Switches to OFA were often from other monoclonal antibodies (36%), most frequently OCR (21%).

For each of the anti-CD20 DMTs, the desire for a high efficacy agent (OCR: 57%; OFA: 51%: RTX: 56%) and the MOA (OCR: 54%; OFA: 53%: RTX: 44%) were influential reasons for switching to the brands (Fig. 3).

For OCR, its unique primary progressive MS indication also played an influential role in DMT selection (23%) (Fig. 3). Administration type preference (40%), perception that patient is highly adherent with medical instructions (36%), COVID-19 pandemic-appropriate option (9%), and starter kit availability (7%) were more influential reasons for selecting OFA. RTX selections were more likely to be influenced by physicians' comfort/familiarity (36%), no/low monitoring requirement burden (21%), payer preference (21%), and low patient cost (26%).

If the current DMT had not been available at the time of prescribing, common alternative options included other anti-CD20 options (OCR: 41%; OFA: 42%: RTX: 33%) (Fig. 4). Among current OFA-treated patients, the subcutaneous DMT was selected instead of infused OCR due to better convenience (67%) and preferred administration method (44%) (Fig. 5). RTX was selected over OCR because of expectations of lower patient copay (62%) and less managed care hassles (46%) (Fig. 6).

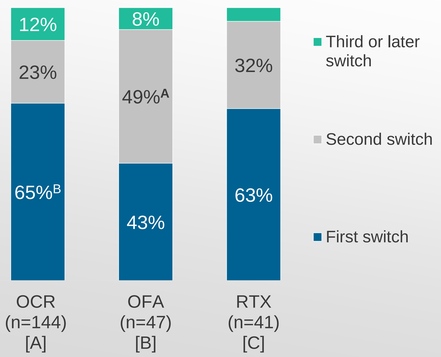
Conclusion

Treatment history and DMT selection drivers varied between MS patients recently switched to different anti-CD20 agents. OFA is more likely to be used later line compared to OCR and among patients where the once-monthly subcutaneous dosing profile was influential in the switch decision. RTX, used off label for the treatment of MS, was used in place of OCR when market access was a concern.

Disclosures:
EM and VS are employees of Spherix Global Insights, an independent market intelligence firm, and have received no industry funding to conduct and report on this study.

Fig. 1

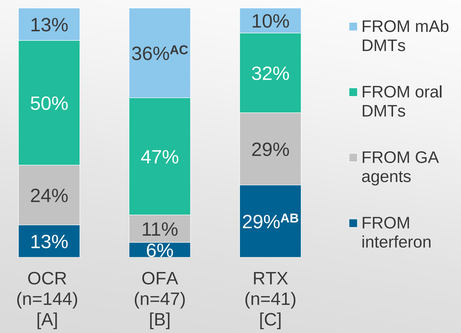
Line of Therapy for Current Anti-CD20 DMTs
% of patients



Superscripts represent statistically significant differences between patient subgroups; p<0.05

Fig. 2a

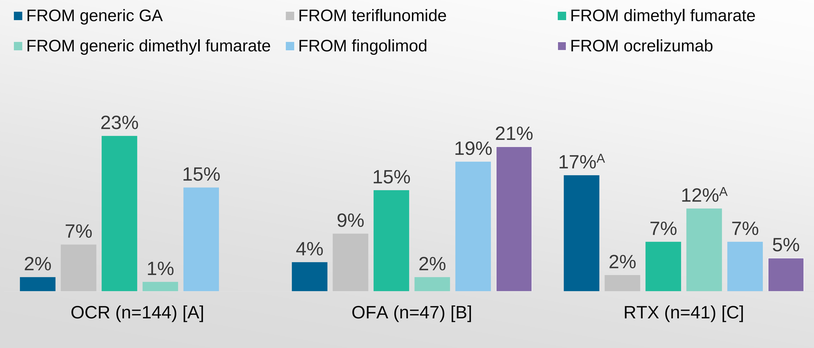
Prior DMT Class When Switching TO Current Anti-CD20 DMT
% of patients



Superscripts represent statistically significant differences between patient subgroups; p<0.05

Fig. 2b

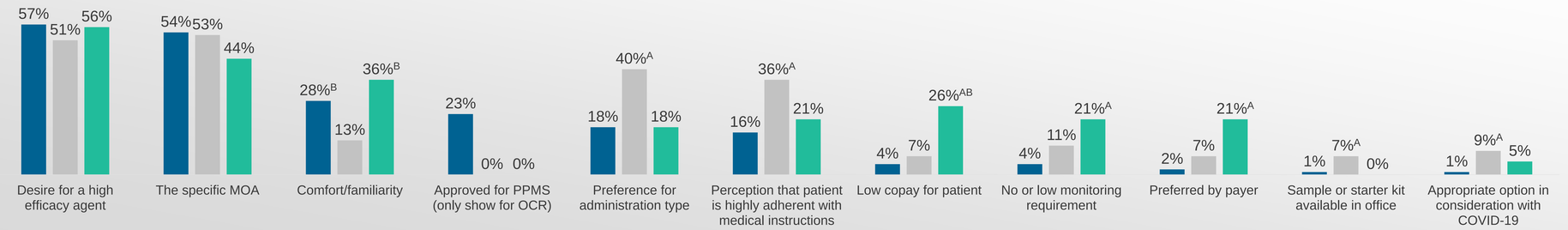
Select Prior DMT When Switching TO Current Anti-CD20 DMT
% of patients



Superscripts represent statistically significant differences between patient subgroups; p<0.05

Fig. 3

Select Reason for Switching Patients to Anti-CD20 mAb DMTs
% of patients



Superscripts represent statistically significant differences between patient subgroups; p<0.05

Fig. 4

Alternative DMT Class if Current Anti-CD20 DMT Had Not Been Available
% of patients

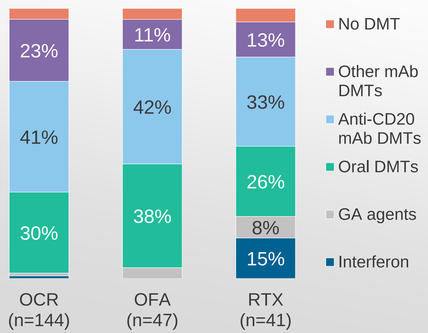


Fig. 5

Top Reasons for Prescribing Ofatumumab Instead of Ocrelizumab
% of patients (n=18)
Caution: Small sample

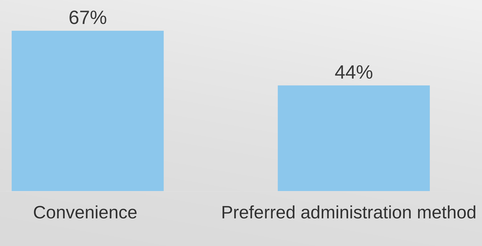


Fig. 6

Top Reasons for Prescribing Rituximab Instead of Ocrelizumab
% of patients (n=13)
Caution: Small sample