# Real World Data Highlights Impact of Ocrelizumab Availability on Recently Switched Multiple Sclerosis Patient Characteristics and Switching Patterns

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#### Background

Retrospective patient chart review fielded by an independent market intelligence agency which specializes in analyzing the disease-modifying therapy (DMT) market, including new start and switching treatment decisions, in multiple sclerosis (MS).

### Objective

Analyze DMT switching patient characteristics and switching patterns pre- and post-launch of ocrelizumab, approved for relapsing forms of MS and first drug approved for primary progressive MS (PPMS).

### Methods

A retrospective patient chart review of 1,035 MS patients who switched DMTs within the previous three months was conducted with 260 US neurologists between January and February 2018. The same study was fielded the two previous years (Q4 2015: 1,027 charts, 194 neurologists; Q1 2017: 1,002 charts, 197 neurologists) allowing for trending. Compared to submitted abstract, methods, results, and conclusions have been updated as needed based upon most recent data.

## Results

Ten months post-ocrelizumab availability, 27% of recently switched MS patients were switched to a monoclonal antibody (mAb) DMT compared to 16-17% in the two prior years (Fig. 1). Considering switches from and to a class, the mAb DMT class benefits most from switches having gained a net 19% share compared to declining net oral DMT class share now at 16% (*Fig. 2*). Oral to mAb DMT switches are increasingly frequent among MS audit patients, with fewer patients switched from an interferon to an oral DMT compared to previous audits (Fig. 3). With 52% of ocrelizumab-switched patients diagnosed with a progressive form of MS (PfMS), PfMS now constitutes a greater share of all recently switched patients (21%) compared to pre-ocrelizumab launch (12%; Fig. 4). Compared to neurologists' potential candidates for a next-line ocrelizumab switch from the 2017 audit, ocrelizumab-switched audit patients are significantly less likely to be diagnosed with relapsing-remitting MS (RRMS) and significantly less likely to have gadolinium-enhancing (GdE) T1 lesions on their last MRI scan. Lost Ocrevus switches, representing audit patients who were candidates for an ocrelizumab switch but were instead switched to another DMT, were significantly more likely to be diagnosed with RRMS and to have a significantly higher mean GdE lesion burden compared to ocrelizumab-switched patients. Expanded Disability Status Scale (EDSS) score and number of T2 lesions did not differ between subgroups (Fig. 5). 29% of ocrelizumab-switched patients specifically requested the DMT with patient request considered a driving factor in 25% of ocrelizumab selection cases (*Fig. 6*).



Note: Spherix Global Insights is an independent healthcare market analytics company. All studies are independently funded and fielded by the organization. Final reports are developed from these studies which are then made available for purchase. For more information, contact info@spherixglobalinsights.com

ients Diagno	osed		Number of T2 L	esions.	
RRMS			(me	an; % with	n 0 lesion
revus 6)	71% <sup>B</sup>	Pre-Lau Candida	nch Ocrevus ites (n=206)	8.60	2%
s- (n=122)	48%	Current Patients	Ocrevus-Switched (n=94)	10.02	1%
witches	72% B	Lost Oc (n=85)	revus Switches	9.29	4%
nded Disabi ale (EDSS)	lity		Number of GdE L (me	esions. an; % with	h 0 lesior
us S)	3.23	[A] Pre-Launcl Candidates (r	n Ocrevus 1. n=206)	.83 BC	38%
witched	3.34	[B] Current Oc Switched Pati	ents (n=97)	.72	56% A
ches	2.93	[C] Lost Ocrev (n=86)	rus Switches 1.	.17 <i>B</i>	40%

