Longterm immunomodulatory therapy in 4,938 outpatients with relapsing-remitting Multiple Sclerosis (RRMS) under special consideration of switching to oral DMDs

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Background
NeuroTransData, a German neurologists’ network of 75 doctor’s offices, is using a MS database (n = 18,608 MS patients) to collect “real world” data for an observation period of 8 years.

Objectives
To analyze the reasons for switching therapy and the clinical course of RRMS patients with disease-modifying drugs (DMDs) during the observation period.

Methods
Application of specific inclusion criteria (disease duration > 7 years; treatment > 2 years with injectable DMDs (Avonex®, Rebif®, Betaferon®/Extavia®, Copaxone®) led to the identification of 4,938 eligible patients with RRMS (female n=3,675 (74.4%) / male n=1,263 (25.6%) ). Those patients, who switched to oral DMDs during the observation period, were further analyzed with special interest in the reasons for switching therapy and their clinical course (EDSS) following the switch.

Results
In total, 1,520 (30.8%) of the 4,938 eligible RRMS patients were switched to oral DMDs, among them 580 (38%) to Dimethylfumarate, 717 (47%) to Fingolimod and 223 (15%) to Teriflunomide.

The percentage of and baseline characteristics of RRMS patients switching from injectable to oral DMDs were comparable between the different therapeutic groups (see figure 1 and table 1).

The main reasons for switching from injectable to oral DMDs were insufficient therapeutic effect (n=502, 33%), followed by patient’s wish (n=293, 19%) and side effects (n=102, 7%), the latter encompassing flu-like symptoms and fear of injections (see figure 2).

Within another 3 months on average, 177 (12%) of the patients having already switched to oral DMDs, were switched once again to another disease-modifying therapy (another oral or injectable DMD or monoclonal antibodies), whereas 1,274 patients (84%) remained on their current therapy. The main reasons for the second switch were side effects (62.1%) followed by insufficient therapeutic effect (15.6%) and patient’s wish (9%) (see figure 3).

Conclusions
The main reason for switching from injectable to oral DMDs was lack of therapeutic efficacy (optimization of therapy), followed by patient’s wish and unfavourable side effects.

In those patients who switched a second time, side effects were primary, followed by insufficient effect and patient’s wish. Most of the patients (84%) switching to oral DMDs remained on that therapy during the entire observation period.