

## **IMPACT OF A VARIABLE TITRATION SCHEME AND DOSE REDUCTION ON TREATMENT ADHERENCE TO SUBCUTANEOUS INTERFERON BETA-1A IN PATIENTS WITH RELAPSING–REMITTING MULTIPLE SCLEROSIS: DATA FROM AN OBSERVATIONAL STUDY**

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**Background/objective:** To investigate the impact of customized, variable titration on adherence to interferon (IFN) beta-1a, 44 or 22mcg subcutaneously three times weekly (tiw), in patients with relapsing–remitting multiple sclerosis (RRMS).

**Methods:** A prospective, open-label, non-interventional 2-year study with baseline assessments that included patient demographics and disease history. Follow-up assessments (week 4, then 3-monthly) and included treatment dosage and patient-reported adherence.

**Results:** 350 patients had evaluable data (mean age, 36.9 years; 77.1% female; mean MS duration, 4.3 years; mean [standard deviation] baseline Expanded Disability Status Scale score, 2.3 [1.4]; 64.9% had no prior long-term MS therapy). Starting doses were: pre-defined titration scheme (41.2%), 22mcg tiw (52.9%), 44mcg tiw (2.3%), other (3.5%). 257 patients (73.4%) reached target dose (44mcg tiw); 44 (17.1%) subsequently switched to 22mcg, of whom 21 (47.7%) resumed the 44mcg dose. Reasons for not reaching target dose included 'efficacy considered sufficient' (n=35) and 'intolerance' (n=24). 55 patients (15.7%) discontinued IFN beta-1a treatment; the most common reasons were intolerance (n=19) and lack of efficacy (n=15). According to physicians, 270 patients (77.1%) injected treatment regularly. The titration scheme did not affect patient-reported adherence: the proportion of patients who did not inject regularly was similar between the titration (15.7%) and 22mcg (14.4%) groups, but was lower (9.1%) for patients whose dose was reduced to 22mcg after reaching the target dose.

**Conclusion(s):** The IFN beta-1a dosing regimen (44 or 22mcg tiw) gives physicians the flexibility to adjust treatment to individual patient needs, which may improve adherence.

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