Poster

[P26-5] P26-5: Immunosuppressive drugs (4): Individualized dosage adjustment

Chair: Kohshi Nishiguchi, Japan

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[P26-5-2] Prolongation of biologic dosing intervals in patient with stable psoriasis; a feasibility study

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Keywords: biologics, adalimumab, etanercept, ustekinumab, dosing interval prolongation

Background

Biologics are usually licensed according to the "*one dose fits all*" principle. It is therefore suspected that a significant number of psoriasis patients are overtreated. However, evidence for successful dose reduction of biologics in psoriasis is scarce. The aim of this study was to investigate whether the dosing interval of three biologics, adalimumab, etanercept or ustekinumab could be prolonged successfully in patients with plaque psoriasis.

Methods

In a prospective exploratory cohort study, 59 psoriasis patients on maintenance treatment with adalimumab, etanercept or ustekinumab were included. After a run-in period of six weeks, the dosing interval of the biologics was prolonged according to a predefined schedule. Our primary objective was to determine the proportion of patients that could maintain a successful prolongation of the per label dosing interval. Secondary objectives were to evaluate the predictive value of baseline trough concentrations for successful dosing interval prolongation and to explore the feasibility of dosing interval prolongations in off label treated patients.

Results

In the per label group, 7 out of 16 (44%) adalimumab patients, 5 out of 16 (31%) etanercept patients, 2 out of 10 (20%) ustekinumab patients achieved a successful dosing interval prolongation. Baseline trough concentrations did not differ significantly between patients with successful dosing interval prolongation and failures. In the off label group, prolongation in patients with already extended intervals was unsuccessful. For patients with shortened intervals, minor prolongation was successful in 3 out of 17 (17.6%) of patients.

Conclusions

Prolongation of the per label biologic dosing interval was feasible in approximately 30% of psoriasis patients with stable minimal disease activity and can reduce costs in clinical practice. Baseline trough concentrations were not predictive for successful dosing interval prolongation.