



EPIDEMIOLOGY

REAL-WORLD EFFECTIVENESS OF ACITRETIN, CICLOSPORIN, FUMARIC ACID ESTERS (FAE) AND METHOTREXATE – DOES TREATMENT HISTORY MATTER? RESULTS FROM BADBIR

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Background: Real-world effectiveness of the systemic therapies methotrexate, ciclosporin, acitretin and fumaric acid esters (FAE) prescribed to patients with moderate-severe psoriasis is poorly characterised.

Objective: To determine whether systemic treatment history predicts the effectiveness of methotrexate, ciclosporin, acitretin and FAE.

Materials and Methods: The British Association of Dermatologists Biologics and Immunomodulators Register (BADBIR) is a pharmacovigilance register investigating the long-term safety of systemic therapies prescribed to psoriasis patients. In total, 4113 patients registering to BADBIR between 2007 and 2017 on methotrexate, ciclosporin, acitretin or FAE with at least six months of follow-up were analysed. Exposure time was calculated from initiation of therapy to censor at: discontinuation date; latest follow-up; or death. Effectiveness was defined as achieving Psoriasis Area and Severity Index (PASI) <3 using the first PASI reported after initiating therapy. Treatment history was classified into incident (first systemic), prevalent (prescribed registration therapy previously), or previous systemic use (prescribed another systemic therapy previously). Multivariable logistic regression estimated the adjusted odds ratio (aOR) of achieving PASI<3.

Results: 1991 (48%) patients were prescribed methotrexate, 1022 (25%) ciclosporin, 765 (19%) acitretin and 335 (8%) FAE. The proportions of incident, prevalent and previous systemic users, respectively, were similar for methotrexate (41%; 18%; 41%), ciclosporin (38%; 16%; 46%) and acitretin (42%; 16%; 42%), but differed for FAE (19%; 15% 66%). Prevalent users of acitretin (aOR 0.67, 95% confidence interval [CI] 0.45-0.99) and ciclosporin (0.64, 0.47-0.87) were less likely to achieve PASI<3 compared with incident users. Prevalent users of methotrexate (0.81, 0.64-1.02) and FAE (0.66, 0.33-1.31), and previous systemic users did not differ significantly to incident users in achieving PASI<3.





Conclusions: Prevalent users of ciclosporin and acitretin registering on those therapies were less likely to achieve effectiveness compared to incident users. The findings for ciclosporin may reflect the intermittent short-term use in clinical practice.

