POS0254  PREDICTING SUCCESSFUL TAPERING OF BIOLOGICS IN PATIENTS WITH INFLAMMATORY ARTHRITIS: SECONDARY ANALYSES FROM THE BIODOPT TRIAL

Keywords: Tapering, Inflammatory arthritis, bDMARD

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Background: Identification of predictors for successful tapering of biologics in patients with inflammatory arthritis (IA) can help to guide physicians and patients; but, evidence is lacking.

Objectives: To identify possible predictors for successful tapering of biological disease modifying anti-rheumatic drugs (bDMARDs) from baseline characteristics.

Methods: BIODOPT was a randomised, open-label, equivalence trial (EudraCT 2017-006167-17) where the adults with rheumatoid arthritis (RA; n=61), psoriatic arthritis (PsA; n=28), and spondyloarthritis (axSpA; n=55) in 12 months low disease activity (LDA) were randomised 2:1 to disease activity-guided tapering or to continuation of biologics as usual care. Successful tapering at 18 months was pre-defined as patients who could reduce their biologic dose ≥50% while still being in LDA. Modified poisson regression with robust variance estimator was used for the analyses. Univariable analyses were: tapering group, sex, age, education, tobacco use, body mass index, comorbidity, arthritis characteristics i.e., diagnosis, duration, duration from diagnosis to treatment start, on ≥2 conventional synthetic DMARDs, on methotrexate, on tumour necrosis factor inhibitor (TNFi), on first bDMARD, on bDMARD number ≥3, duration of bDMARD, duration of remission on bDMARD, duration of LDA on bDMARD, previous bDMARD tapering, C-reactive protein (CRP) before first bDMARD, Health Assessment Questionnaire Disability Index (HAQ-DI), Pain Visual Analog Scale (VAS), Fatigue VAS, Patient Global Health VAS, Short Form Health Survey 36 (SF-36) physical and mental component summary (PCS and MCS), tender joints, physician Global Health VAS, CRP, and in remission. Potentially important variables (univariate p<0.10) were included in the multivariable model. C-statistics was used to assess model prediction.

Results: One-hundred-and-forty-two patients were randomised to tapering (n=95) or control (n=47) of which 32% (30/95) and 2% (1/47) achieved successful bDMARD tapering at 18 months. A statistically significant associations (univariate p<0.10) was identified between successful tapering and tapering group, HAQ-DI, Pain VAS, Fatigue VAS, Patient Global Health VAS, SF-36 PCS, and SF-36 MCS. Table 1. However, the only independent predictor for achieving successful tapering in the multivariable model was allocation to the tapering group, risk ratio (RR): 14.0 (95%CI: 19-101.3). Interestingly, individuals with a better mental health state (higher SF-36 MCS) were potentially more likely to achieve successful tapering: RR: 1.06 (95%CI: 0.99-1.13). A sensitivity analysis only including tapering group and SF-36 MCS found both variables to be independent predictors, tapering group: RR 14.3 (95%CI: 2.0-101.9) and SF-36 MCS: RR: 1.06 (95%CI: 1.01-1.11). The multivariable model gave reasonable prediction, Figure 1.

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PAIN IN RMDs

POS0255  A PRO-NOCICEPTIVE POPULATION OF NEUTROPHILS INFILTRATE SENSORY GANGLIA AND MEDIATE CHRONIC WIDESPREAD PAIN IN FIBROMYALGIA SYNDROME

Keywords: Pain, Fibromyalgia, Innate immunity

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Background: Although the aetiology of chronic widespread pain in fibromyalgia syndrome is unknown and generally recognised as a central pain syndrome, several recent studies point towards a peripheral aetiology. Afferent activity of immune cells and associated cytokine signalling has also been linked to