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Serum levels of thymus and activation-regulated chemokine in patients with psoriasis: Higher in patients with generalized pustular psoriasis

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Thymus and activation-regulated chemokine (TARC) is designated a T_H2 type chemokine. Serum TARC levels sharply reflect the disease activity of atopic dermatitis. The previous studies reported that serum TARC levels in patients with psoriasis vulgaris (PsV) were comparable with those in healthy controls, however, we sometimes encounter psoriasis patients with high serum levels of TARC. The association of clinical severity of psoriasis with serum TARC levels has not been investigated yet. Furthermore, to date, serum TARC levels in patients with psoriatic arthritis (PsA) or generalized pustular psoriasis (GPP) have never been reported. Thereby, we investigated the association of serum TARC levels with psoriasis by types of psoriasis, and examined correlations of serum TARC levels with clinical severity scores and other results of blood tests. Psoriasis patients visiting our hospital from April 2013 to April 2018 were included in this study. All data were collected retrospectively from the patient charts. Data on 75 patients (51 men and 24 women; PsV 30 patients, PsA 29 patients, GPP 16 patients) were analyzed. The serum TARC levels in patients with GPP were significantly higher than those in PsV and those in PsA. There was significantly positive correlation between serum TARC levels and PASI scores. In conclusion, our study revealed that serum TARC levels were high in patients with GPP. Furthermore, serum TARC levels can potentially be one of biomarkers reflecting the severity or systemic inflammation caused by psoriasis in patients with psoriasis, not so much as in patients with atopic dermatitis.

Commercial disclosure: None identified.

14410

Impact of mirikizumab maintenance dosing at week 104 on health-related quality of life in patients who had less than PASI 90 response at week 16: A phase 2 study analysis

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Background: Improvements in health-related quality of life (HRQoL) are reported up to week 52 with mirikizumab, a humanized p19-directed IL-23 monoclonal antibody.

Methods: Patients with moderate to severe psoriasis were randomized 1:1:1:1 to SC placebo, mirikizumab 30 mg/100 mg/300 mg (n = 52/51/51/51) and dosed at wk 0 and wk 8 in a placebo-controlled phase 2 trial (NCT02899988). Patients with < 90% Psoriasis Area and Severity Index (< PASI90) response at wk 16 received maintenance mirikizumab 300 mg SC q8w. Percentage of patients with 0,1 Dermatology Life Quality Index (DLQI[0,1]) response and least squares mean (LSM) changes from baseline in observed DLQI total scores and Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36) scores were evaluated. Missing data for categoric outcomes were imputed as non-responders and LSM changes assessed by analysis of covariance (nominal *P* values).

Results: Percentages of patients, treated with placebo, mirikizumab 30 mg/100 mg/300 mg in the induction period who had < PASI 90 response at wk 16 and received maintenance mirikizumab 300 mg q8w (n = 50/34/21/15), with DLQI (0,1) response at wk 16 were 4.0%/20.6%/28.6%/20.0% and at wk 104 were 76.0%/64.7%/66.7%/66.7%. Patients (n = 45/29/19/13) reported LSM (SE) changes from baseline to wk 104 total DLQI score of −12.5 (0.5), −12.4 (0.6), −11.2 (0.8), and −9.3 (0.9). Patients (n = 45/29/19/13) reported LSM (SE) changes from baseline to wk 104 mental component summary scores of 2.3 (1.0), 3.2 (1.2), 3.2 (1.5), and 3.5 (1.7), and physical component summary (PCS) scores of 6.5 (1.0), 4.9 (1.3), 2.7 (1.5), and 1.1 (1.8). Changes from baseline were significant ($P < .05$) except PCS in the 100/300 mg and 300/300 mg groups.

Conclusions: Improvements in HRQoL continued through wk 104 following maintenance treatment with mirikizumab 300 mg SC q8w.

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Efficacy and safety of two injection volumes of abobotulinumtoxinA in treatment of glabellar lines: Data from two studies

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Objective: To present the efficacy and safety of abobotulinumtoxinA (ABO) for the treatment of glabellar lines (GLs) using 2 different injection volumes to deliver the same dose. To provide practitioners with more flexible instructions for use, two reconstitution volumes are available for ABO products. In the EU, the recommended injection volumes are 10 U per either 0.05 mL or 0.1 mL. In the US, the recommended injection volumes are 10 U per either 0.05 mL or 0.08 mL.

Methods: We present efficacy and safety data from two multicenter, randomized, double-blind studies comparing a single treatment with 50 U of ABO for moderate to severe GLs using 0.05 mL or 0.1 mL per injection point (EU, NCT02108158) or 0.05 mL or 0.08 mL per injection point (US, NCT02718118). Both studies have been published.

Results: In the EU study (62 white females, mean age 49), both injection volumes achieved early onset of effect, high effectiveness, and long duration of effect. At month 6, ≥55% of subjects still had an improvement in wrinkle severity at rest. Safety profiles were similar between groups, with no serious AEs. In the US study (60 subjects, mean age 46), both injection volumes achieved clinically significant improvements in appearance and severity of GLs with acceptable safety profiles (no serious AEs).

Conclusions: In both studies, the two injection volumes of the 50 U ABO administered were well tolerated and effective for treatment of glabellar lines, and there were no significant differences in safety or efficacy between injection volumes.

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Short-term discontinuation rate of five commonly prescribed medications for moderate to severe psoriasis in a US commercial population

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Background: Ustekinumab (UST) demonstrates greater real-world adherence/persistence for psoriasis (PsO) within 1 year after initiation than adalimumab (ADA), apremilast (APR), etanercept (ETA), and secukinumab (SEC). Short-term discontinuation rates remain unclear.

Objective: To evaluate discontinuation rates within 3 months after initiation of ADA, APR, ETA, SEC, or UST for moderate to severe PsO.

Methods: This retrospective cohort study analyzed Optum's deidentified Clinformatics Extended Data Mart: Socio-Economic Status claims database. Adults with ≥1 PsO diagnosis (but no baseline diagnosis of ankylosing spondylitis, juvenile chronic polyarthritis, non-Hodgkin lymphoma, lymphoid leukemia, rheumatoid arthritis, hidradenitis suppurativa, Crohn disease or ulcerative colitis), newly initiating a study medication (prior exposure to other PsO treatments was allowed) from 7/1/2014 to 9/30/2017 were included in non-mutually exclusive cohorts. Continuous enrollment from 6 months before to 3 months after initiation (index date) was required. Discontinuation was defined as no refill or a medication switch before the end of the maximum allowed gap (based on labeled maintenance dosing interval). Unadjusted 3 month post-index discontinuation rates were descriptively reported.

Results: The study included 5100 ADA, 3361 APR, 1197 ETA, 1350 SEC, and 3457 UST patients. Cohorts were 44%-51% female, mean age was 48-51 years; Quan-Charlson comorbidity index score ranged from 0.3 to 0.5. The biologic-naïve proportion in each cohort was: ADA, 78%; APR, 79%; ETA, 76%; SEC, 31%; UST, 60%. The 3-month discontinuation rate for each was: ADA, 44%; APR, 73%; ETA, 68%; SEC, 31%; UST, 11%.

Conclusions: UST demonstrated the lowest short-term discontinuation rate. Information on short-term discontinuation rates may be useful for treatment decisions.

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