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Long-term treatment with secukinumab led to sustained clinical improvement and normalization of inflammatory markers in patients with psoriasis

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Background: Secukinumab led to complete/almost-complete clinical disease clearance and normalization of inflammatory biomarker levels in patients with psoriasis in the primary analysis (week 12) of the ObePso-S study (NCT03055494). Here, we report 52-week findings from the same study.

Methods: ObePso-S was a randomized, double-blind, phase 4 trial investigating anti-inflammatory effects of secukinumab in skin, fat, and blood. Patients were randomized 2:1 to secukinumab 300 mg or placebo for 12 weeks. Eligible patients entered the open-label phase and received secukinumab 300 mg every 4 weeks. The primary efficacy variables, absence of expression of keratin 16 (K16, marker of keratinocyte hyperproliferation) and PASI90 responses, were measured at week 52 (final analysis) using non-responder imputation.

Results: Seventy-eight of 82 patients (secukinumab, n = 50; placebo, n = 28) entered the open-label phase; 71 completed the study. At week 52, 61.1% of secukinumab patients showed no K16 expression (week 12, 79.6%); 59.6% and 32.7% had PASI90 and PASI100 responses, respectively (week 12, 55.8%; 26.9%). Normalization of leukocyte and C-reactive protein levels was sustained. Anti-inflammatory effects and clinical responses were also observed in placebo-treated patients who switched to secukinumab (K16-negative, 71.4%; PASI90/100, 71.4%/21.4%). Among secukinumab patients with PASI90/100 responses, K16 was not expressed in 57.4% and 72.7%, respectively.

Conclusions: Continued treatment with secukinumab led to increases in PASI90/100 responses and sustained normalization of inflammatory biomarker levels. Findings further support an association between clinical improvement and systemic anti-inflammatory effects of secukinumab. Additional ongoing analyses will elucidate the role of secukinumab in modulating cellular activity of adipocytes, keratinocytes, and blood cells.

Commercial disclosure: This study was funded by Novartis Pharmaceuticals Corporation, East Hanover, NJ.

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Patient characteristics and treatment strategies in pediatric patients diagnosed with atopic dermatitis versus eczema: A real-world retrospective cohort study

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Background: While atopic dermatitis (AD) and eczema are used interchangeably, no studies have compared pediatric patients with these diagnoses. This study describes and compares pediatric patients diagnosed with AD versus eczema.

Methods: Data were collected from Modernizing Medicine.'s Electronic Medical Assistant (EMATM) EMR system and were de-identified in accordance with HIPAA. Patients were aged 2-17 years and had a clinical diagnosis of AD or eczema only between 1/1/16 and 12/31/18 (first diagnosis = index date [ID]). A 6-point investigator global assessment (IGA) for AD and 7-point IGA for eczema defined disease severity.

Results: 79,134 pediatric AD patients and 187,165 with eczema were identified. AD patients were younger (mean [SD] age: 9.1 [4.7] vs 10.6 [4.6], $P < .0001$), and had a lower rate of allergic contact dermatitis (AD: 60.4%, eczema: 96.9%, $P < .0001$). In patients with available data, a higher proportion of AD patients were scored in the top two IGA categories compared with eczema patients: 11.0% vs 5.5%, respectively. In topical-only treated patients at ID, more AD patients received immunosuppressants (13.2% vs 6.7%; $P < .0001$) and PDE4 inhibitors (7.9% vs 3.9%; $P < .0001$). In systemic therapy-treated patients at ID, more AD patients used oral immunosuppressants (5.9% vs 1.1%; $P < .0001$) and fewer used systemic steroids (87.5% vs 96.3%; $P < .0001$).

Conclusions: This study found differences in patient characteristics and treatment patterns in pediatric patients with AD versus eczema. AD was associated with younger age and lower rate of allergic contact dermatitis, higher disease scores, and higher use of immunosuppressants.

Commercial disclosure: This study was sponsored in full by Eli Lilly & Company.

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Dermoscopic and histopathologic correlation of facial lichen planus pigmentosus: An observational study

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Background: Lichen planus pigmentosus is a rare variant of lichen planus, more commonly seen in the Indian subcontinent.

Objective: To devise a dermoscopic grading for facial lichen planus pigmentosus by correlating with histopathology.

Methods: 70 cases of facial hyperpigmentation were assessed. 50 patients with dermoscopic and histopathologically confirmed facial lichen planus pigmentosus were included in the study. Demographic data were recorded. History of sun exposure (in hours), cosmetic use, hair dye use, fragrance use was recorded to address the confounding factors. The dermoscopic finding was correlated with the histopathology and a grading system was devised. Results: Patients were categorized into 4 grades: grade 1: only dots (8/50), grade 2: dots and globules (10/50), grade 3: patchy pigmentation (17/50), grade 4: diffuse pigmentation (15/50). On histopathologic evaluation, Patients with grade 1 LPP had mild pigment incontinence (<10 melanophage/×400 field); in grade 2, mild to moderate (10-20 melanophage/×400 field); grade 3 moderate (20-30 melanophage/×400 field) and in grade 4 severe (>30 melanophage/×400 field) pigment incontinence.

Conclusions: Dermoscopic grading of LPP can be done using the given grading system to avoid invasive biopsy on the face, plan appropriate therapy, and assess the response to therapy.

Commercial disclosure: None identified.

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Cutaneous squamous cell carcinoma in nonwhite individuals: A single-institution case-control study

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The rate of new diagnosis of cutaneous squamous cell carcinoma (cSCC) is on the rise. This has led to a significant health and economic burden in the United States. Despite the fact that the United States population will be mostly non-white by 2050, little is known about how these cancers affect non-white individuals. The aim of our study was to define cSCC in the non-white population. A retrospective cohort study between non-white vs white was performed to identity the tumor characteristics, treatments, outcomes and survival of cSCC. This was a multicenter, single institutional study at Mayo Clinic (Arizona, Minnesota, and Florida). Subjects were identified in our retrospective database. The cohort consisted of 716 total patients, 99 non-white and 617 white. The age at biopsy or first treatment was earlier for non-white individuals compared with white individuals (67.7 [SD 15.2] vs 75.7 [SD 10.9]; $P < .01$). Non-white individuals were more likely to be immunosuppressed (26.5% vs 13%; $P < .01$). There was no statistical difference in the tumor location (including sun-exposed vs non−sun-exposed) or form of biopsy or treatment. After adjusting for age, the non-white group had a worse disease-free survival (Adj HR: 1.59, 95% CI 1.04-2.43, $P = .04$). In conclusion, nonwhite with cSCC were younger, immunosuppressed, and had a lower disease-free survival. With the increase in racial diversity within the U.S, more research needs to be done to identify the underlying cause of outcome differences between non-white and white individuals with cSCC.

Commercial disclosure: None identified.