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Analyzing the relationship between Altmetric score and literature citations in the dermatology literature

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We reviewed the 15 dermatology journals with the highest impact factors based on the Journal Citation Reports, then analyzed the 10 most highly cited articles within those journals, published in 2013 and 2016. For each of the 150 total articles, we studied the Altmetric score, number of citations, as well as specific metrics on mentions from Twitter, Facebook, blogs, news outlets, Wikipedia, Reddit, Google+, and more. Impact factors, as well as Twitter presence, were recorded for each of the top journals across each year. Using Microsoft Excel, we analyzed the data with Pearson correlation coefficients and descriptive statistics. Citation number and journal impact factor demonstrated a significant positive correlation in the 2013 cohort ($r = 0.463$, $P < .0001$). Analysis revealed a significant positive relationship between citation count and Altmetric scores for articles published in 2013 ($r = 0.267$, $P = .0009$) and a significant positive relationship between Altmetric scores and journal impact factor for the same cohort of articles ($r = 0.255$, $P = .002$). In the 2016 cohort, Altmetric ratings were also significantly correlated with citation count ($r = 0.244$, $P = .003$). Impact factor was significantly associated with Altmetric scores as well ($r = 0.283$, $P = .0005$). Dissecting the components comprising the Altmetric score in both 2013 and 2016 revealed that Twitter, news outlets, and Facebook were the top three platforms in which articles received mentions. In conclusion, Altmetric score weakly corresponded with citation count and journal impact factor across both year cohorts. We conclude that the Altmetric score could serve as an additional measurement of article impact in the field of dermatology.

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A phase 3 study of 0.045% tazarotene lotion for once-daily treatment of moderate to severe acne vulgaris

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Tazarotene is a topical retinoid for acne vulgaris treatment. Current gel/foam/cream formulations can cause irritation, limiting their use. A novel tazarotene 0.045% lotion formulation was developed utilizing polymeric emulsion technology, providing uniform distribution of active drug/hydrating excipients. In this phase 3, double-blind, randomized, vehicle-controlled, 12-week study, eligible patients aged ≥9 years with moderate to severe acne (n = 813) were randomized (1:1) to receive once-daily tazarotene 0.045% lotion or vehicle. Coprimary efficacy end points were absolute change from baseline to week 12 in mean inflammatory/noninflammatory lesion counts and percent of patients achieving ≥2-grade reduction from baseline at week 12 in Evaluator Global Severity Scores (EGSS) with a clear/almost clear score (treatment success). Adverse events (AEs) and cutaneous safety/tolerability were also assessed. Absolute lesion counts were significantly reduced with tazarotene (least-squares mean [SD] inflammatory: −15.6 [10.4]; noninflammatory −21.0 [14.7]) versus vehicle (−12.4 [10.4]; −16.4 [14.5]; $P <$ .001, both). Percent changes from baseline in inflammatory and noninflammatory lesion counts were significantly greater with tazarotene (least-squares mean: −55.5%; −51.4%) than vehicle (−45.7%; −41.5%; $P < .001$, both). The percent of patients achieving treatment success was significantly greater with tazarotene (25.5%) versus vehicle (13.0%; $P < .001$). Most treatment-emergent AEs were of mild-moderate severity. Treatment-related AEs with tazarotene included application site pain (4.6%) and dryness (3.6%). Transient increases in scaling, erythema, itching, burning, and stinging began at week 2; most scores were generally similar to baseline by week 12. In this study, an innovative polymeric emulsion tazarotene 0.045% lotion was efficacious and well tolerated versus vehicle in patients with moderate to severe acne.

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Treatment of moderate to severe acne with once-daily tazarotene 0.045% lotion in males: Pooled analysis of two phase 3 studies

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Acne vulgaris has been reported in 85% of adolescents, with moderate to severe acne occurring more frequently in adolescent/adult males than females. Tazarotene is a potent topical retinoid for acne treatment, but irritation with existing formulations may limit its use. An innovative tazarotene 0.045% lotion formulation was developed by utilizing polymeric emulsion technology. In two phase 3, double-blind, vehicle-controlled 12-week studies, eligible patients aged ≥9 years with moderate to severe acne were randomized (1:1) to receive once-daily tazarotene 0.045% lotion or vehicle. Data for male patients were summarized descriptively at week 12 in this analysis. Efficacy assessments included reductions in inflammatory/noninflammatory lesion counts and percent of patients achieving ≥2-grade reduction in Evaluator Global Severity Scores (EGSS) and a clear/almost clear score (treatment success). Adverse events (AEs) and cutaneous safety/tolerability were also assessed. Of 1614 total pooled participants, 550 were males (n = 268 tazarotene 0.045%; n = 282 vehicle). Changes from baseline in absolute lesion counts were higher with tazarotene (least-squares mean [standard deviation] inflammatory: −15.9 [10.5]; noninflammatory −22.4 [16.1]) versus vehicle (−11.3 [10.5]; −14.4 [17.8]). More patients achieved treatment success with tazarotene (25.1%) versus vehicle (12.7%). The percent of males reporting treatment-emergent AEs (TEAEs) was similar between tazarotene (19.0%; 50/263) and vehicle (19.3%; 53/275). In both groups, most TEAEs were of mild-moderate severity. Serious AEs occurred in 1 patient in each group (not treatment-related). The most common administration-related TEAE was application site pain (2.7% tazarotene; 0% vehicle). The novel tazarotene 0.045% lotion was efficacious and well tolerated in male patients with moderate to severe acne.

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Dupilumab treatment in adult patients with moderate to severe atopic dermatitis: A real-world single-center experience from Turkey

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Background: Dupilumab has been shown to be an effective and safe treatment alternative for recalcitrant atopic dermatitis (AD) in adults.

Objective: The aim of this study is to evaluate the real-world use of dupilumab in adult patients with moderate to severe AD.

Methods: A retrospective review of the patients who were treated with dupilumab in our specialized AD outpatient clinic in 2019 was made. Disease severity was evaluated using the physician's global assessment (PGA) [a 6-point scale (0-5) categorized as: clear, almost clear, mild, moderate, severe, very severe] and eczema area and severity index (EASI). The data were shown as median (IQR).

Results: A total of 9 patients (F:3, M:6) with a median age of 42 (32-64.5) were included. Among them 5 had adult-onset AD and one AD associated with Netherton syndrome (NS). Disease duration was 360 (162-510) months. Previous treatments included systemic corticosteroids (100%), cyclosporine (77.7%), phototherapy (66.6%), azathioprine (55.5%), methotrexate (55.5%) and omalizumab (33.3%). Baseline EASI and PGA scores were 16.75 (12-26.8) and 4 (3-4.5) respectively. Following a median 7 (6-11) weeks of dupilumab monotherapy, EASI and PGA scores decreased to 7.25 (1.8-21.25) and 2 (1-3), respectively ($P = .012$ and 0.010). Three and 2 patients reached EASI-50 and EASI-90, respectively. No adverse effects were seen except for two patients (one with NS) developing conjunctivitis which responded well to antimicrobial ointment.

Conclusions: In real-world clinical setting, dupilumab provided significant improvements in clinical signs and symptoms of therapy-resistant AD without any serious adverse effects.

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