268 Analysis of association between variation in ambient solar ultraviolet exposure and disease severity for patients with moderate-severe psoriasis

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Evaluating the placebo response in clinical trials of moderate-severe psoriasis affords the opportunity to detect the effects of psoriatic tumors on psoriasis severity in a randomized setting in a patient population. We hypothesize that the placebo response is influenced by ambient solar ultraviolet radiation exposure (UVR), with confounding from use of systemic, ultraviolet, or potent topical therapies, which are prohibited during trial conduct. Anonymized placebo-treated subject data, including dates and PASI scores for baseline and Week 16 visits and approximate individual patient location (first 3 zip code digits, which served as a proxy for subject location), pooled from the placebo-controlled double blinded periods (Weeks 0-16 of 3 moderate-severe psoriasis clinical trials (NCT02178877, NCT02684370, NCT02684357), were accessed through the Vivli data platform. Patients were excluded if they were pregnant, lactating, or had a history of dermatologic issues other than psoriasis in the past year. We strata linked and estimated mean daily ambient erythemally weighted UVR for the months corresponding to baseline and Week 16, using data from the Ozone Monitoring Instrument on board the NASA EOS Aura spacecraft, and the German climate center. Simple linear regression of the percentage change in PASI score from baseline to Week 16 on ambient UVR was performed. The results of this study indicate that ambient UVR is an important predictor of the placebo response in moderate-severe psoriasis clinical trials.

269 Incidence of bullous pemphigoid and pemphigus vulgaris in a nationwide study of United States veterans

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Analyses of online interactions among atopic dermatitis (AD) patients are limited. This study aims to analyze the content and engagement of online posts on topical corticosteroid (TCS) use in AD. OL 2017 posts extracted from 5 social media groups, 949 referenced TCS safety, defined as a higher-order theme (HOT). Within the HOT of TCS safety, 11 lower-order themes (LOTs) were identified: TCS use and Addiction/Withdrawal (36.7% of posts), TCS use and TCS effectiveness (31.2%), TCS use and TCS effectiveness (3.8%), TCS use and TCS effectiveness (2.6%), TCS use and TCS effectiveness (2.3%), TCS use and TCS effectiveness (0.1%). Posts were assigned positive, negative, or neutral sentiment and an engagement score. Negative sentiment was more prevalent (n=665; 69.0%) compared to positive (n=665; 69.0%) or neutral sentiment (n=214; 24.7%). Sentiments were given a value of -1 (negative), 0 (neutral), and 1 (positive). All subgroups had negative mean sentiment scores (FB_EczemaSupportGroup -0.93, 95% CI [-1.01–.84]; r/eczema -.60 [-.64–.56]; r/SkincareAddiction -.50 [-1.01–.006]; r/TS_Withdrawal -.92 [-1.00–.84]; r/EczemaCures -.39 [-.74–.04]. Mean engagement was significantly higher (p<0.001) in subreddits compared to the Facebook group FB_EczemaSupportGroup (0.93, 95% CI [0.37–1.42); r/eczema 4.75 [3.97–5.52]; r/SkincareAddiction 7.3 [3.16–12.4]; r/TS_Withdrawal 9.16 [7.05–11.27]; r/EczemaCures 7.19 [3.66–11.1]). The information online regarding TCS use in AD is overwhelmingly negative; education efforts should incorporate concerns determined by sentiment and theme analysis.

270 Association of lichen planus with cardiovascular disease: An international cohort study

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While telemedicine has allowed for continued care for patients with dermatologic conditions, the role of technology among patients with dermatologic conditions is understudied. Patient willingness to engage in telemedicine is associated with age, gender, education, and race, and negatively impacted by internet access. We hypothesized that willingness to engage in telemedicine is associated with other factors. To test this, we conducted a cross-sectional survey of 6,437 US adults. Differences in willingness to electronically exchange information of any type in the year prior to diagnosis. We identified 2,430 individuals with LP and 548 with PV during the study period. The mean ages were 75.6 and 65.0 for BP and PV, respectively. The majority of patients were male (65% & 95%) and white (75% & 70%). The incidence of BP in 2005 was 17.8 per 100,000 dermatology patients versus 18.7 in 2017. The incidence of PV in 2005 was 17.8 per 100,000 dermatology patients versus 19.1 in 2017. Overall, for both diagnoses there was a decreased incidence at the end of the study period compared to the beginning. However, the trend over time did not demonstrate a gradual downward. There were a few interval upticks in incidence for BP and downticks for PV. Despite the limitations of this study drawn from a predominately male population, these data help to support the idea that the incidence of BP and PV are not increasing in the US.

271 “Moisture and get off any steroid cream”: An analysis of social media posts regarding TCS use in AD

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Recent studies suggest that the incidence of bullous pemphigoid (BP) has increased. These studies are drawn from European populations, and there is little data on the incidence trend for BP or pemphigus vulgaris (PV) in the United States (US). The objective of this study was to evaluate the trend in incidence for BP and PV using the Veterans Health Administration’s (VHA) nationwide health care database. We conducted a retrospective cohort study of veterans diagnosed with BP or PV in VHA dermatology clinics between January 1, 2005 and December 31, 2017. Patients were included if they had a diagnosis of BP or PV after their first VA encounter. From the VHA electronic health record, we identified patients with a diagnosis of BP (ICD-10 L30.0) or PV (ICD-10 L30.9). We conducted an independent replication in the US population-based cohorts, the UK Biobank and All of Us. Methods: We performed a three- population-based cohorts, the UK Biobank and All of Us. Differences in willingness to electronically exchange information of any type in the year prior to diagnosis. We identified 2,430 individuals with BP or PV during the study period. The mean ages were 75.6 and 65.0 for BP and PV, respectively. The majority of patients were male (65% & 95%) and white (75% & 70%). The incidence of BP in 2005 was 17.8 per 100,000 dermatology patients versus 18.7 in 2017. The incidence of PV in 2005 was 17.8 per 100,000 dermatology patients versus 19.1 in 2017. Overall, for both diagnoses there was a decreased incidence at the end of the study period compared to the beginning. However, the trend over time did not demonstrate a gradual downward. There were a few interval upticks in incidence for BP and downticks for PV. Despite the limitations of this study drawn from a predominately male population, these data help to support the idea that the incidence of BP and PV are not increasing in the US.

272 Access and usage of technology among patients with dermatologic conditions

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Background: Patient reluctance to engage in telemedicine remains a key challenge to digital telemedicine adoption in the era of COVID-19. Teledermatology, in particular, is heavily impacted by this, given its’ foundation in visual assessments. An understanding of patient attitudes towards digital image sharing and determinants of these attitudes is necessary to address patient-centered barriers to teledermatology adoption. Objective: To evaluate digital image sharing and determinants of attitudes towards digital image sharing. Methods: We conducted a cross-sectional survey of pooled data from the Health Information National Trends Survey 4, Cycle 3 and 4, and Linked Electronic Health Records (LEHR) of patients with dermatologic conditions. We analyzed the results using an inverse variance weighted random effects model. We evaluated the trend in incidence for BP and PV using the Veterans Health Administration’s (VHA) nationwide health care database. We conducted a retrospective cohort study of veterans diagnosed with BP or PV in VHA dermatology clinics between January 1, 2005 and December 31, 2017. Patients were included if they had a diagnosis of BP (ICD-10 L30.0) or PV (ICD-10 L30.9). We conducted an independent replication in the US population-based cohorts, the UK Biobank and All of Us. Differences in willingness to electronically exchange information of any type in the year prior to diagnosis. We identified 2,430 individuals with BP or PV during the study period. The mean ages were 75.6 and 65.0 for BP and PV, respectively. The majority of patients were male (65% & 95%) and white (75% & 70%). The incidence of BP in 2005 was 17.8 per 100,000 dermatology patients versus 18.7 in 2017. The incidence of PV in 2005 was 17.8 per 100,000 dermatology patients versus 19.1 in 2017. Overall, for both diagnoses there was a decreased incidence at the end of the study period compared to the beginning. However, the trend over time did not demonstrate a gradual downward. There were a few interval upticks in incidence for BP and downticks for PV. Despite the limitations of this study drawn from a predominately male population, these data help to support the idea that the incidence of BP and PV are not increasing in the US. [169x255]1 Harvard Medical School, Boston, Massa-