LB747
Prevalence of lichen planus across racial/ethnic groups in the *All of Us* research program: a US-based cohort study

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Introduction: Lichen planus (LP) is an inflammatory dermatosis whose epidemiology has not been well described. We sought to describe the prevalence of LP across racial and ethnic groups in the United States-based *All of Us* Research Program. Methods: We performed a cross-sectional analysis of the *All of Us* Research Program, a US-based cohort study that aims to enroll and share health and genetic data on over 1 million participants with a focus on groups historically underrepresented in biomedical research. We identified LP using participant self-reported survey and electronic health record data. We calculated the prevalence of LP among participants with available data and reported results and demographics across self-identified racial and ethnic groups. We calculated 95% confidence intervals using the Wald method. Results: Of 203,025 participants with available data, we identified 788 LP cases. The overall prevalence of LP was 0.39% (0.36-0.42) with a 3:1 female predominance (586 females [74.4%]) and an average age of 66 (standard deviation 13). 82% of LP cases were in those age 55 and older, with the highest prevalence seen among the 65-74 year-old group (34% of the LP population). The prevalence of LP varied by racial/ethnic group: prevalence was highest in whites (n=470, 0.45% [0.41-0.49]), followed by Blacks (n= 175, 0.42% [0.36-0.49]), Asians (n=15, 0.26% [0.13-0.42]), and Hispanics (n=93, 0.23%, [0.18-0.28]). The age distribution also varied by race/ethnicity: average age was higher among whites (69 years, SD 11) compared to racial/ethnic minorities (Black, 62 [SD 11]; Asian, 59 [SD 13]; Hispanic, 61 [SD 13]). Conclusions: In the US-based *All of Us* cohort, the prevalence of LP was 0.36% to 0.42% and varied by racial and ethnic group. These results need validation in other population-based cohorts.

LB748
An epidemiological study on Cutaneous Melanoma, Basal Cell and Epidermoid Carcinomas diagnosed in a sunny city in southeast Brazil in a five-year period

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Skin cancer is increasing worldwide; in tropical places the population is exposed to high levels of solar radiation, raising the risk for developing cutaneous carcinoma. Aimed at encouraging prevention measures and the early diagnosis of these tumors, this study analyzed data on cutaneous melanomas, basal cell and epidermoid carcinomas, using as source the medical records of all patients diagnosed with skin cancer in a pathology service in a Brazilian city from 2015 to 2019. The incidence of skin cancer cases was correlated with the histological type, sex, age, and location. Significant association was observed between age and type of cancer (p=0.0085); age and sex (p=0.0298); and type of cancer and body region affected (p<0.01). Those 161 cases analyzed comprised 93 basal cell, 66 epidermoid carcinomas, and only 2 melanomas. In the group aged 19 to 30 years, the epidermoid form was most prevalent; from 31 to 59 years, the basal cell prevailed; in 60-year-olds or over, both types had higher frequencies. Associating age and sex, in groups aged 19 to 30 women were most affected. There was a gender balance in the age group 60-year-olds or over. As for topography, there was a high prevalence in the head and neck, followed by upper limbs. Relating histological type and topography, there was a prevalence of basal cell carcinomas in head/neck and chest. In upper limbs, the epidermoid form prevailed. About 82% of patients 60-year-olds or over had head and neck skin carcinoma. In conclusion, young people were more affected by the epidermoid form, which manifested itself significantly in the upper limbs, presenting a behavior of this histological type. Patients aged 60 years or older were the most affected; in gender balance, they present intense head and neck involvement, while areas such as chest and lower limbs are little affected, revealing that body areas continuously exposed to solar radiation are more predisposed to the development of skin cancer.

LB749
Association between obesity and sunburn: A cross-sectional analysis in claims data

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A growing body of literature supports a seemingly paradoxical association between obesity and an increased risk for melanoma and a decreased risk for keratinocyte carcinomas (KCs). Investigations using survey data show an association between obesity and sunburn, but this is subject to recall bias. We aimed to assess the association between obesity and sunburn diagnosed in medical encounters. We conducted a cross-sectional study using claims data from the Truven Health MarketScan (2009-2017) and Health Risk Assessment (HRA) Database, which includes commercial insurance claims data and self-reported BMI. Patients $\geq$18 years old with at least one medical encounter were included. The primary outcome was sunburn diagnosis. We performed multivariate logistic regression, adjusting for age, gender, region, insurance type, and healthcare utilization. Approximately 3.4 million patients met inclusion criteria, with 6,962 having at least one sunburn diagnosis. Multivariate logistic regression showed obesity was statistically significantly associated with sunburn (odds ratio [OR]1.26, 95% confidence interval [CI] 1.20-1.32). Female gender (OR 1.25), younger age (OR 0.98 per 1-year increase in age), and healthcare utilization (OR 1.02 per 1 additional outpatient encounter per year) were also statistically significantly associated with sunburn. Our study shows a positive association between obesity and sunburn diagnosis in a large claims dataset, aligning with self-reported data and supporting the theory that sunburn may partially explain the increased risk for melanoma in patients with obesity. This does not address the lower risk for KCs. Understanding patterns of UV exposure in patients with obesity can inform interventions to minimize melanoma risk.

LB750
Clinical and demographic characteristics of encounters with sunburn in claims data

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Sunburn is a preventable risk factor for skin cancer. Prior investigations of sunburn in healthcare settings have focused on emergency department visits. More epidemiologic information on patients presenting with sunburns is important to inform public health initiatives and further research. Here we characterize the clinical settings and demographic characteristics of patients who receive a sunburn diagnosis. We used Truven MarketScan, a national deidentified commercial insurance database, from 2008-2018. Eligible patients had a sunburn diagnosis code entered (*ICD-9* or *ICD-10*) during an encounter. The primary outcomes were patient demographics, clinical settings, provider specialties, management provided, and geographic location, presented with descriptive statistics. We identified 186,168 patients with 230,987 sunburn encounters. 55.3% were women and 26.9% were <18 years of age. Most of the encounters occurred during summer (57.6%), followed by spring (29.9%). The most common region was the South (38.4%), followed by the Northeast (23.2%). 26.4% of the encounters were in the emergency or urgent care setting, and 73.4% were outpatient. Fewer than 1% of patients were hospitalized. The most common treatments included systemic and topical steroids (7.2% and 5.2%, respectively) and NSAIDs (2.7%). The most common provider specialty was Dermatology (23.5%), followed by Family Medicine (19.9%). This study provides insight into the clinical settings and demographics of patients diagnosed with sunburn across healthcare settings and highlights the importance of sunburn prevention in the pediatric population, which comprised more than a quarter of patients diagnosed with sunburn.

LB751
COVID-19 complications in patients with Hidradenitis Suppurativa: A multi-center study

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Hidradenitis Suppurativa (HS) is a chronic inflammatory skin disorder that causes abscesses in intertriginous areas and is also associated with numerous other conditions. There is limited literature on the outcomes of COVID patients with HS so the goal was to investigate the impact of AD on COVID outcomes. A retrospective cohort study was done using TriNetX, a federated real time database of 63 million records. COVID patient cohorts were identified by validated ICD-10 and serology codes per CDC guidelines from 1/20/2020 to 2/23/2021. A 1:1 propensity score analysis was conducted, adjusting for comorbidities and demographics, to calculate adjusted Risk Ratios (aRR) with 95% CI. 30-day COVID complications were examined with severe COVID being defined as a composite of mortality and ventilation. Subgroup analyses were also performed for HS patients on systemic antibiotics. In a matched sample of 2004 patients in each cohort, there was no statistically significant difference between HS-COVID patients and non-HS COVID patients in hospitalization (0.93 [0.8-1.1]), acute respiratory distress syndrome (1.31 [0.8-2.2]), mechanical ventilation (1.06 [0.7-1.6]), mortality (1.00 [0.6-1.8]), and severe COVID (1.07 [0.8-1.5]) but there was a difference in sepsis (1.37 [1.0-1.9]). Subgroup analysis revealed that HS-COVID patients with a one-year history of systemic antibiotic use were at a higher risk for hospitalization (1.27 [1.01-1.6]) compared to HS-COVID patients without one-year history of systemic antibiotics wheras all other outcomes assessed had no differences. HS-COVID patients are not at higher risk for more severe COVID outcomes compared to COVID patients without HS. However, HS patients with a history of systemic antibiotics are at a higher risk for hospitalization compared to HS patients without a history of systemic antibiotics. Further studies are warranted to visit the longer-term impacts of COVID on HS patients.

LB752
A cross sectional survey of skin cancer knowledge, attitudes, and sun care practices in an underserved Phoenix population

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The incidence of melanoma and non-melanoma skin cancers is on the rise. The Hispanic population is more likely to be diagnosed with melanoma at an advanced stage and have poorer overall survival. The primary aim of our study was to assess the skin cancer knowledge, attitudes, perceived risk, and sun care practices of an underserved, primarily Hispanic, population in the Phoenix area. A cross sectional survey of 208 patients recruited during a skin cancer screening program was performed. Our population was primarily Hispanic (64.9%), from Mexico (87.9%). The Hispanic population had an average knowledge score of 3.68 for the 6 skin cancer questions asked, the lowest of any group, and significantly lower than the White/Caucasian population (p<.01). However, they displayed the highest desire to learn more about skin cancer (64.6%, "strongly agree"). They were the most concerned about developing skin cancer (50.4%, "very concerned"), but had low rates of sun protection usage (45.7% sunscreen, 49.2% protective clothing use). There is a discordance between sun exposure, skin cancer knowledge, and sun care practices in the Phoenix area Hispanic population. This data highlights the opportunity to educate this at-risk population about skin cancer and the importance of sun care practices.