352 Dermatology research with the Observational Health Data Sciences and Informatics (OHDSI) network
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The Observational Health Data Sciences and Informatics (OHDSI) network enables access to billions of de-identified, standardized health records and built-in analytics software for observational health research. We review dermatology uses of OHDSI. The OHDSI collaborative network of researchers, as a successor of the Observational Medical Outcomes Partnership, a public-private partnership between the FDA, pharmaceutical entities, and healthcare providers. Instrumental to OHDSI is the Common Data Model, which establishes transformation conventions into a single standardized data format, supporting large scale analytics across heterogeneous data partners. Similarly, a standard vocabulary exists, enabling interoperability between systems, facilitating homogeneity and data transparency, and supporting high-quality research. OHDSI studies may be conducted in real-time to build cutting-edge tools, built on informatics that has greatly enhanced the ease and speed of observational studies. Its scale lends increased power and reproducibility and characterizes the generalizability of clinical trials to real-world populations; it improves accuracy of estimations and predictions, facilitating the study of rare exposures, diseases, and outcomes. Various applications of OHDSI are represented in the literature, particularly in adverse event reporting, heritability estimation, adherence to treatments, and characterization of patient outcomes. Together they illustrate the potential of OHDSI in dermatology: its adoption would facilitate examination of treatment patterns that lack best practice guidelines, improve the dermatologic knowledge base, and ultimately, patient outcomes. Bibliometric analysis revealed increasing numbers of dermatology-related OHDSI papers in PubMed — from 2 papers in 2014 to 25 papers in 2020, with topics including prediction modeling, pharmacovigilance, and prognostic studies.

354 The problematic use of change scores in dermatology clinical trials
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Change scores are common, but important underlying assumptions, such as stable disease at baseline and equal outcomes changing linearly with an approximate slope of one, are necessary for use and interpretation. Likewise, transformations like dichotomized endpoints and percentage change from baseline present unique problems. To assess change score use, we queried all 2015-2019 clinical trials from JAMA Dermatology, Bethesda, MD; JID, JAAD, and JEADV, summarized change score use, and evaluated underlying assumptions. Seventy-four trials used pre-post baseline scores, 25 used percentage change from baseline, 91 used dichotomized cut points, 37 used baseline adjusted scores. Our study illustrated several of the common problematic assumptions (OR: 0.40). Eighty-two trials used outcomes for patient selection (32.3%). Seven (8.54%) used a pre-selection score for baseline and 16 (19.5%) had a run-in time prior to baseline scoring. Twenty-two studies (15.4%) plotted mean outcome values over time and an additional 39 studies (32.2%) plotted various change scores. Forty-four (38.9%) scores appeared linear, but only 5 (4.40%) had a slope of approximately 1. The FDA often mandates change scores for medication approval. Accordingly, industry-funded trials were more likely to use change scores (OR from logistic regression=2.96, 95% CI 1.75-4.82), especially dichotomized (OR=3.32, 1.89-5.83). Use of change scores is common. Model assumptions are infrequently met or discussed. Many robust approaches to pre-post outcomes are available. Dichotomization is particularly troublesome and leads to loss of data and bias. We recommend the elimination of change score usage when possible, as more robust and easily interpretable models exist. Also, we recommend discussion of FDA endpoint requirements with policymakers.

355 Significant disparities in prognosis and survival in Black cutaneous lymphoma patients emphasize the need for more focused study and care
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Cutaneous lymphomas (CLs) are a rare type of non-Hodgkin lymphomas that consist of a diverse group of B- and T-cell subtypes; the most common of which are mycosis fungoides (MF) and Sézary syndrome (SS). While some CL subtypes are indolent, others may be aggressive and associated with decreased survival. Previous studies have shown worse outcomes and poorer survival for Black patients with MF/SS; however, this data is sparse, and racial/ethnic disparities in prognosis across CL subtypes have not been well elucidated. We present a single-center study of 51 patients examining racial/ethnic variance in diagnostic features and survival among all subtypes of CL. Our population was comprised of 10.4% Asian, 8.1% Black, 20.4% Hispanic, 59.7% white, and 1.4% of unknown race/ethnicity; 46.2% female and 53.7% male; and 16 distinct subtypes of CL. We found that Black CL patients had worse overall survival (p<0.0001) when compared to all other racial/ethnic groups. We affirmed that Black MF/SS patients had worse outcomes and demonstrated that this held true regardless of stage (p<0.0001). Additionally, we showed that, in the MF/SS population, Black patients had a higher rate of development of folliculotropism and/or large cell transformation, which are aggressive features that may portend a poor prognosis. Racial/ethnic disparities in CL have a tangible impact on the lives of Black patients with increased morbidity and mortality. Further studies are requisite to investigate the mechanisms, whether biological and/or extrinsic, behind these inequities as to better guide treatment and ancillary care for the improvement of outcomes for the Black CL population.

356 Polypoid melanoma is associated with aggressive histopathological characteristics and poor clinical prognosis compared to non-polyoid melanoma
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Polypoid melanoma is a rare subtype of melanoma characterized by pedunculated exophytic growth. These tumors tend to have a thick Breslow depth, but it is unknown if the prognosis of this subtype is worse compared to other variants of melanoma. A retrospective review was performed of 37 polypoid melanomas and compared to 264 non-polyoid melanoma cases. Each case was independently re-evaluated by board-certified dermatopathologists for the following histopathologic parameters including Breslow depth, mitotic rate, ulceration, and angiolymphatic invasion. Basic demographic data and clinical characteristics were collected from electronic medical record data and compared, including clinical stage at diagnosis and survival, between polypoid and non-polyoid melamomas. Patients with polypoid melanoma had a younger average age than patients with nodular melanoma. Histopathologic review revealed that polypoid tumors had a significantly higher mitotic rate, and had a higher rate of ulceration and angiolymphatic invasion than nodular melanomas. Analysis of clinical outcomes by log-rank test showed a higher risk of distant recurrence and worse overall survival in polypoid tumors compared to nodular melanomas. Multivariate analysis showed an association of polypoid subtype with higher clinical stage at diagnosis and worse overall survival. Significant disparities in prognosis including Breslow depth and ulceration. This study shows that polypoid melanoma is associated with a higher frequency of aggressive histopathological characteristics and poor clinical prognosis compared to non-polyoid nodular melanoma.

357 Qualitative study of pain experiences among patients with hidradenitis suppurativa
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Hidradenitis suppurativa (HS) is an inflammatory skin disease with recurrent painful, malodorous abscesses at intertriginous sites. Pain, which is the most burdensome symptom of HS, is more highly correlated with reduction in quality of life (QoL) than is disease severity. Evidence guiding HS pain management is lacking, and individuals living with HS are at risk of chronic opioid use. This study employed a grounded theory approach to elucidate pain experiences as well as attitudes regarding opioid use among patients with HS. We gathered quantitative data from patient reported outcomes and disease characteristics and qualitative data from semi-structured interviews. Interviews were conducted with English-speaking patients ≥18 years of age with confirmed HS diagnosis and average Numeric Rating Scale (NRS) pain score of ≥2 over the preceding week. Data collection continued until thematic saturation was reached, requiring a total of 21 interviews. Mean age was 36.9 years, 71% of participants were female, and 71% were non-Hispanic. Almost all (96%) participants had Hurley Stage II or III disease. NRS score for pain over the preceding week was 5.24 (SD: 3.2), and 62% of patients had Dermatology Life Quality Index scores ≥4, indicating a very to extremely large impact of HS on QoL. Thematic qualitative data analysis yielded four preliminary domains: pain character, pain impact, pain management, and exacerbating/attenuating factors. Participants described their pain using terms associated with both nociceptive and neuropathic pain character. Within the pain impact domain, pain was associated with reduced mobility, depression, and anxiety, and loss of quality of life. Pain management was largely dependent on pharmacotherapy, but participants described additional strategies to attenuate pain, which included ergonomic measures, hydration, and exercise. These findings provide useful information for health care providers to guide the management of pain in patients with HS.