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Overall, this study is the first comprehensive RNA-seq molecular profiling of tape-strips from care.

Patients confirmed that it was uncommon for their dermatologists to engage them in CVD included a lack of familiarity or comfort with guidelines, concern about working outside of

jects experienced AE and their frequency of sunscreen use; where frequent use was defined as

and database mailings (RSRB# 35516). We received 132 surveys between August 2018 and

sunscreen use differed between patient types and heathy controls (HC) and if the type of

sunscreens contain organic UVR filters that can penetrate skin, enter systemic circulation and

Ultraviolet radiation (UVR) exacerbates cutaneous lupus (CLE) and systemic lupus (SLE)

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Ultraviolet radiation (UVR) excabates cutaneous lupus (CLE) and systemic lupus (SLE) symptoms. Patients are instructed to avoid UVR exposure and to use sunscreen daily. Most sunscreens contain organic UVR filters that can penetrate skin, enter systemic circulation and cause unintended biological effects. There is little known about sunscreen use by patients or the determinants that drive its use. A survey was conducted to determine if the frequency of sunscreen use differed between patient types and healthy controls (HC) and if the type of sunscreen (organic or mineral) used correlated with experiencing adverse effects (AE) from sun exposure ( rash, flares, feeling sick). Subjects were recruited from clinics (RRSBR 35516) and data were collected from August 2018 through May 2019.

The survey elicited information on race, Fitzpatrick skin type, sunscreen type, SPF value, whether subjects experienced AE and their frequency of sunscreen use; where frequent use was defined as daily or at least 1x per week. Results find that the frequency of use differed between CLE and SLE patients and HC and whether or not patients reported suffering AE from the sun exposure. 71.8% of all patients suffer AE but frequent sunscreen use varied by race suggesting an opportunity to improve clinical care. HC that report using sunscreen frequently do so to prevent skin cancer whereas patients reported use based on physician advice as well as to prevent skin cancer. Frequent sunscreen users prefer products with SPF >30. Patients with AE are 2x more likely to use organic-based sunscreen. Patients without AE are 3x more likely to use mineral-based sunscreen. Since systemic levels of organic filters rise over time with daily use, it is plausible that sunscreen may contribute to disease pathology. Our ongoing studies seek to examine how and if UVR filters contribute to immune cell abnormalities in lupus.

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Outcomes reported in clinical trials of facial aging: A systematic review

389 participants completed the survey. For all skin cancer types,

30. Patients with AE are 2x more likely to use organic-based sunscreen. Patients without AE are 3x more likely to use mineral-based sunscreen. Since systemic levels of organic filters rise over time with daily use, it is plausible that sunscreen may contribute to disease pathology. Our ongoing studies seek to examine if and how UVR filters contribute to immune cell abnormalities in lupus.

Tape-strips capture gene-expression changes in moderate-to-severe atopic dermatitis patients treated with dupilumab.

Although skin biopsy studies utilizing transcriptomic profiling have helped elucidate the immune and barrier dysregulation underlying atopic dermatitis (AD), the invasive nature of biopsies limits their use in larger and longitudinal studies. Tape-strips are emerging as a minimally invasive alternative for the study of AD skin, but they have not yet been used for tracking gene-expression changes with systemic treatment. In this real-life study, we evaluated transcriptomic changes and therapeutic-response biomarkers in AD patients treated with dupilumab. Three-month follow-up of patients using tape-strips, including clinical, histological, and lesional tape-stripped skin from 18 AD patients before and after 16 weeks of dupilumab therapy as well as from 17 healthy controls. At baseline, we detected 6,745 and 4,859 differentially expressed genes (DEGs) between lesional and nonlesional skin versus normal skin respectively. After treatment, we detected 681 and 817 DEGs respectively (fold-change >3 and false-discovery-rateFDR<0.05). Tape-strips captured significant changes in important AD immune (e.g. CCL13, CCL17, CCL18) and barrier (e.g. PPI, FAS, PSORS1,C2) biomarkers associated with disease activity. Changes in the psoriasis-remission subset were significantly correlated with clinical disease improvements (EASI) (R=0.5 or R<0.4, p<0.05). Overall, this study is the first comprehensive RNA-seq molecular profiling of tape-strips from moderate-to-severe AD patients treated with dupilumab, revealing that tape-strips can capture significant modulatory changes in key AD biomarkers with dupilumab and may provide a helpful approach for tracking therapeutic responses in AD.

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Acceptable delay between diagnosis and treatment of melanoma, cutaneous squamous cell carcinoma, and basal cell carcinoma

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