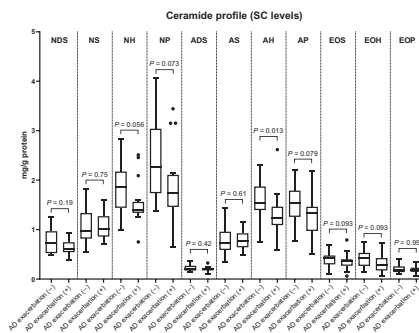
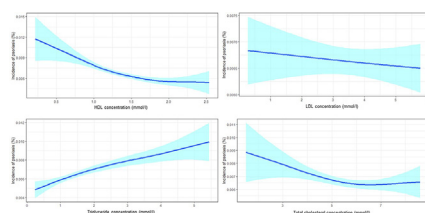


Stratum Corneum Ceramide Alterations Predict Exacerbation of Atopic Dermatitis

FLG and ceramides (CERs), which are crucial for skin barrier function, are altered in atopic dermatitis (AD). Because the exacerbation of AD is often observed after cessation of treatment in patients with remission, Sho et al. examined the differences in the frequency of *FLG* mutation and stratum corneum CER profiles at AD remission to evaluate the use of these factors as biomarkers for exacerbation. Although no significant differences in *FLG* mutation frequency were noted between patients with AD exacerbation and those without exacerbation, the CER profile was remarkably altered. Significant differences in the carbon chain lengths of some CERs at remission were observed between the groups, suggesting that longer CER carbon chains observed in patients without AD exacerbation may serve as biomarkers of substantial remission of AD for clinical treatment decisions. **See page 3184**



High-Density Lipoprotein and Triglyceride: Effective Predictor of Incident Psoriasis Risk

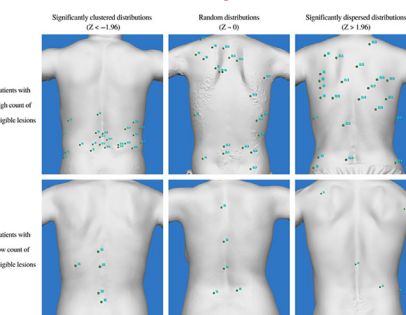


To more thoroughly evaluate the previously described relationship between psoriasis and serum lipid concentrations, Xiao et al. performed a cohort study using longitudinal data from a large European adult population, comprising nearly 2,900 participants with incident psoriasis from the UK Biobank. High-density lipoprotein (HDL) deficiency (<1.00

mmol/l for men, <1.3 mmol/l for women) and high triglyceride concentration (≥ 1.7 mmol/l) were associated with 16.6% and 10.6% increased risk of incident psoriasis, respectively. Both factors predicted the risk of incident psoriasis independently of age and body mass index, especially in the female population. No such effects were noted between low-density lipoprotein or total cholesterol and incident psoriasis. The authors suggest that changes in lipid profiles, mainly HDL and triglyceride, might be major factors for the pathomechanism of psoriasis **See page 3192**

Acquired Melanocytic Neoplasms Commonly Cluster

Accumulating evidence has suggested that the distribution of acquired melanocytic nevi may not be random, and although local nevus density is correlated with an increased risk of melanoma, it remains unclear whether the location of melanomas correlates with the areas of high nevus density. In patient-level analysis, Chousakos et al. found that the nevi and melanoma on the back were more likely to be distributed in a cluster pattern than in a dispersed pattern, indicating a nonrandom distribution. In lesion-level analysis, melanomas were more likely to occur in proximity to other melanocytic neoplasms, and melanomas occurred more frequently in proximity to other melanocytic neoplasms than to nevi. This spatial distribution information may not only increase our understanding of oncogenic pathways but may also lead to improved melanoma detection and management. **See page 3274**



Polygenic Architecture Contributes to Age of Onset of AD in Japanese Patients

Although GWASs have uncovered loci implicated in allergic diseases, convincing evidence about genetic associations that impact the age of onset of AD is lacking. Hikino et al. utilized linear regression analysis to examine the age of onset of AD and 17 SNPs from recent GWAS using 1,344 patients with AD in a Japanese population. The risk allele rs59039403 in *NLRP10* was significantly associated with earlier age of onset by 3.28 years, and each of the other significant loci accelerated the age of onset by an average of 0.46 years. This study suggests that early- and late-onset AD have different underlying genetic architectures. **See page 3337**

Combination Treatment for Patients with Vitiligo

Patients with vitiligo often improve after treatment with phototherapy and topical corticosteroids or calcineurin inhibitors. Furthermore, inhibition of Jak1/2 signaling, which drives IFN- γ -mediated pathogenesis, with ruxolitinib cream has also been associated with considerable repigmentation in this patient population. In an open-label extension study of 19 patients who had received ruxolitinib cream alone in a phase 2 randomized trial, Pandya et al. found that treatment with ruxolitinib cream combined with narrow-band UVB phototherapy was well-tolerated and resulted in improvement in facial and total body repigmentation in 78.9 and 94.7% of patients, respectively. These effects were also observed in most patients who did not show significant improvement after 24 weeks of ruxolitinib cream alone. **See page 3352**