Characteristics of Adults with Atopic Dermatitis Initiating Biologics and JAK Inhibitors in the CorEvitas AD Registry

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BACKGROUND
- Biologics and Janus kinase inhibitors (JAKi) are systemic treatment options for patients with atopic dermatitis (AD).
- Differences between biologics and JAKi that may influence real-world use include:
  - Mechanisms of action with differing effects on the immune system and skin barrier
  - Routes of administration (injection vs. oral)
  - Dosing frequencies, costs, and safety profiles
- However, no studies, to our knowledge, have evaluated differences in characteristics of patients on these medications in a real-world setting.

OBJECTIVES
- Primary: Describe the demographics, clinical characteristics, treatment patterns, and disease severity and patient-reported outcome measures of adult patients with AD initiating either a biologic (dupilumab or tralokinumab) or JAKi (abrocitinib or upadacitinib) in the prospective, non-interventional CorEvitas AD Registry
- Secondary: Identify factors associated with prescribing JAKi compared to biologic therapy

STUDY DESIGN AND PATIENT SELECTION
- Adult patients enrolled in CorEvitas AD Registry
- Reported outcome measures:
  - Investigators’ Global Assessment for AD (vIGA), success (0), moderate (1), severe (2), very severe (3)
  - Eczema Area and Severity Index (EASI)
  - Body surface area (BSA)
  - Dermatology Life Quality Index (DLQI)
  - Numeric rating scale (NRS)

STUDY DESIGN
- Cross-sectional study of adult patients initiating either a biologic or JAKi in the CorEvitas AD Registry between 7/21/2020 and 7/31/2023
- CorEvitas AD Registry is a prospective, non-interventional registry for patients with AD under the care of a dermatologist or qualified physician extender from 68 clinical sites in the United States and Canada
- Data are collected from both patients and their treating providers during routine clinical encounters, and include demographics, disease phenotypes, duration, medical history (including treatment history), disease activity and severity, and patient-reported outcome measures

METHODS
- Analysis
  - Patient characteristics were summarized at initiation of therapy using descriptive statistics, overall, and by prior experience with biologic/JAKi therapy and any systemic therapy
  - Exploratory multivariable Poisson regression with a robust variance estimator was used to identify factors associated with JAKi initiation compared to biologic initiation
  - Covariates included:
    - Age, sex, race
    - Geographic region of residence: US
    - Smoking status
    - Smoking intensity
    - Duration of AD disease

PATIENT CHARACTERISTICS
- Study strengths include use of the CorEvitas AD Registry, with clinical data (such as patient-reported outcomes) that are not included in claims databases.
- Study limitations include that characteristics associated with biologic or JAKi initiation may be influenced by timing of medication approval and availability, and results for the registries may not be generalizable to all patients with AD in the US and Canada.

CONCLUSIONS
- The initiated medication was the first-line systemic among 86.4% of biologic initiators and 40.7% of JAKi initiators
- In unadjusted analyses, biologic initiators were slightly older and had greater disease severity compared to JAKi initiators

STRENGTHS AND LIMITATIONS
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