Prevalence and Incidence of Atopic Dermatitis in Patients With Alopecia Areata in the United States: A Population-Based Study

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ABSTRACT

OBJECTIVE
To assess the real-world prevalence, incidence, and relative risk of comorbid atopic dermatitis among patients with alopecia areata using data from a US administrative claims database.

CONCLUSIONS
Patients with moderate-to-severe and very severe alopecia areata had a higher prevalence and incidence of comorbid atopic dermatitis than patients with milde alopecia areata.

It may be beneficial for healthcare professionals treating patients with moderate-to-severe alopecia areata to also consider the potential presence of atopic dermatitis in these patients and optimize treatment decisions accordingly.

METHODS

STUDY DESIGN
The retrospective analysis evaluated claims from the MarketScan Commercial Claims and Encounters database in the United States.

Eligible patients were aged ≥11 years at index date (defined as the date of first AA diagnosis), had an AA diagnosis between 01/01/17–07/31/23, and had continuous health plan enrollment for 5 years prior to index (Figure 1).

Prevalence of AD was assessed during the 5 years preceding the AA index date; prevalence was also assessed over a longer duration and included males with a 1 AD diagnosis anytime from 01/01/2007 to the index date, regardless of continuous enrollment status of the health plan.

METHODS CONTINUED

AD incidence was assessed from the 6 months after the AA index date through the time of AD diagnosis or end of continuous enrollment.

Relative risk for developing AD comorbidity among patients with AA was estimated by Cox proportional hazards modeling, controlling for age, sex, race, Charlson Comorbidity Index, and geographic region.

Mild AA: Diagnosis of AU or AT not meeting criteria for incidence to moderate-to-severe AA
Moderate-to-severe AA:
Diagnosis of AD in or before the first follow-up time interval
Very severe AA:
Diagnosis of AD in or before the second follow-up time interval

RESULTS

STUDY COHORTS
A total of 429,903 patients with AA were identified in the database between 01/01/17–07/31/23. Of these patients, 12,835 (2.9%) met all eligibility criteria.

Patients with moderate-to-severe AA and very severe AA had higher prevalence and incidence of comorbid moderate-to-severe AD (4.2% and 3.3%, respectively) than patients with mild AA (1.8%).

Patients with moderate-to-severe AA had a 1.70-fold higher adjusted hazard ratio (95% CI 1.06, 2.71) for developing AD comorbidity than patients with mild AA (adjusted hazard ratio 1.0; 95% CI 0.99, 1.01).

Patients with moderate-to-severe alopecia areata had a higher incidence of AD comorbidity than patients with mild AA (Figure 4). AD in patients with mild AA had a 1.58-fold higher incidence of AD comorbidity than patients with moderate-to-severe AA (Figure 6).

CONCLUSIONS
Patients with moderate-to-severe and very severe alopecia areata had a higher prevalence and incidence of comorbid atopic dermatitis than patients with mild alopecia areata.

Patients with moderate-to-severe alopecia areata had a 3.32-fold higher incidence of AD comorbidity than patients with mild AA (Figure 4).

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