# **Characterization of Patients with Co-morbid Dermatological and Mental Health Conditions**



Lauren Stevens, Pam Kumparatana, Madeleine Elyze, Rose Clemens, Stefan Weiss | OM1, Inc, Boston, MA, USA

### **Background**

Inflammatory diseases atopic dermatitis (AD), psoriasis (PsO), and psoriatic arthritis (PsA) cause severe psychological strain due to fear of social rejection and self-stigmatization. Individuals with psoriasis are significantly affected in their health state utility, perception of general health, and social functioning when compared with individuals without chronic disease and those with certain primary medical conditions.<sup>1</sup>

### Methods

The OM1 platform collects and links structured and unstructured dermatologic data from DataDerm, the clinical data registry of the AAD, and other data sources including those for mental health. This analysis focused on patients with AD, PsO, or PsA and concomitant depression/anxiety observed between January 2013 through January 2021. Patients were described with respect to demographics, comorbid mental health conditions, and encounters with mental health specialists. Therapeutic class was used as a proxy for disease severity.

## **Objective**

To examine the prevalence of depression and anxiety among patients with (1) AD, (2) PsO, and (3) PsA segmented by treatment class.

### Results

This analysis included 167,623 AD patients, 101,721 PsO patients and 54,271 PsA patients. As shown in Table 1, comorbid depression and anxiety was prevalent among AD patients (10.7%, 12.0%), PsO patients (13.5%, 14.1%), and PsA patients (18.6% depression, 18.0% anxiety). Of note, more individuals with PsO or AD on a systemic medication, compared to those on a topical medication, had a diagnosis of depression or anxiety (Figure 1).

# Figure 1. Prevalence of Depression or Anxiety among Patients taking Topical or Systemic Medications 20.0% Depression Anxiety 10.0% Depression Anxiety 10.0% Ps0. Italiana Ps6. I

Table 1. Characteristics of Patients with AD, PsO, or PsA

Age         Mean (SD)         37.9 (25.6)         48.9 (17.1)         51.9 (13.8)           Race         White         64.1%         76.4%         74.8%           Mental Health Conditions         Depression         10.7%         13.5%         18.6%           Anxiety         12.0%         14.1%         18.0%	Characteristic		AD (N=167,623)	PsO (N=101,721)	PsA (N=54,271)
Mental Health Depression 10.7% 13.5% 18.6% Conditions	Age	Mean (SD)	37.9 (25.6)	48.9 (17.1)	51.9 (13.8)
Health Depression 10.7% 13.5% 18.6% Conditions	Race	White	64.1%	76.4%	74.8%
Anxiety 12.0% 14.1% 18.0%	Health	Depression	10.7%	13.5%	18.6%
7417/0 12.070 14.170 10.070		Anxiety	12.0%	14.1%	18.0%

# **Main Findings**

Depression and anxiety are common to patients with inflammatory conditions like AD, PsO and PsA. Additional research is necessary to understand whether treatment of the underlying inflammatory disease leads to improved mental health.