



## Abstract N°: 1611

### Title: Humanistic burden of chronic spontaneous urticaria relative to psoriasis and atopic dermatitis in the US

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#### Introduction

There are limited published data on the comparative burden of chronic spontaneous urticaria (CSU) vs other chronic dermatological diseases. The objective of this study was to compare the humanistic burden of CSU, psoriasis (PSO), and atopic dermatitis (AD) in the US.

#### Materials and methods

Data from adult respondents with a physician diagnosis of CSU, PSO, and AD, respectively were collected from the 2019 US National Health and Wellness Survey, a nationally representative survey of patient-reported outcomes. Burden was assessed using the Short Form (SF)-36v2 (Mental [MCS] and Physical Component [PCS] Summary scores), health utility scores (SF-6D, EQ-5D-5L, score: 0-1), EQ-5D visual analogue scale (VAS) (score: 0-100), Dermatology Life Quality Index (DLQI, score: 0-30), General Anxiety Disorder-7 (GAD-7, score: 0-21) and Patient Health Questionnaire-9 (PHQ-9, score: 0-27). Generalized linear models, adjusted for differences in patient characteristics, comorbidities, and prescription usage, were used to compare outcomes. Results are presented as adjusted mean/percentage (standard error [SE]), p-values reported for each comparison (CSU as the reference group).

#### Results

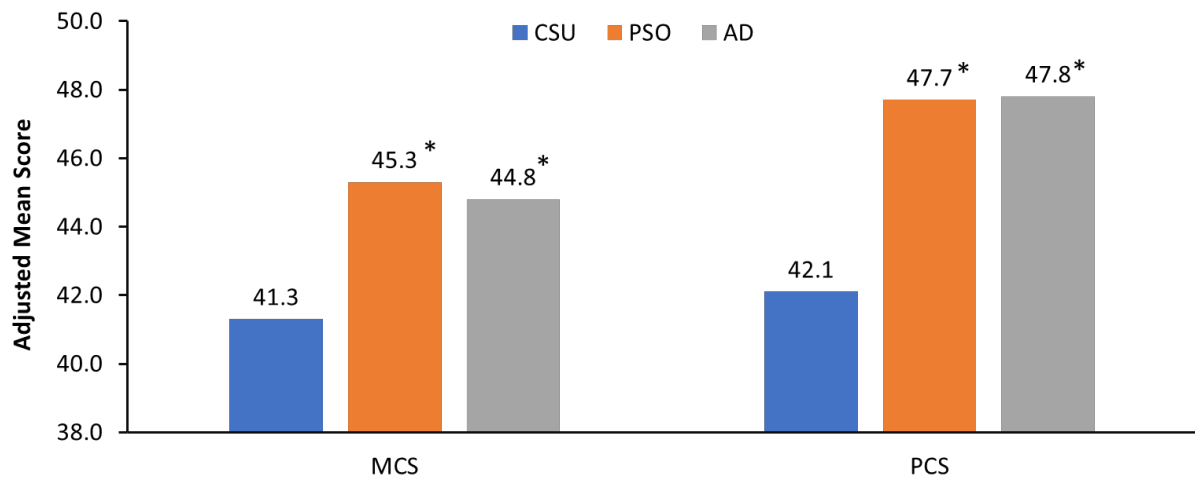
Among 74,994 respondents, 371 had CSU, 2,061 had PSO, and 549 had AD. Mean (SD) age at data collection 41.7 (14.0), 51.4 (16.6) and 48.4 (16.2); female 59.8%, 57.3% and 76.1% for CSU, PSO and AD respectively. Mean mental and physical status scores showed greater impairment among CSU compared to PSO and AD (**Figure 1**). Health utility scores were significantly lower (worse) among CSU vs PSO and vs AD patients (SF-6D: 0.61 [0.01] vs 0.68 [0.003] vs 0.67 [0.01]; EQ-5D: 0.69 [0.01] vs 0.77 [0.004] vs 0.78 [0.01];  $p < 0.0001$  for all). EQ-5D VAS score was significantly lower for CSU 66.2 [1.2] vs PSO 70.4 [0.5];  $p = 0.002$  and vs AD 70.3 [1.0];  $p = 0.0094$ . DLQI scores were significantly higher (worse) in patients with CSU vs PSO and vs AD (9.4 [0.3] vs 3.5 [0.1] vs 4.0 [0.2];  $p < 0.0001$  for all). Percentage of respondents with mild/moderate/severe anxiety (GAD-7  $\geq 5$ ) and depression (PHQ-9  $\geq 5$ ) were significantly higher among CSU patients compared to PSO and AD: GAD-7: 58.3% [3.1] vs 35.3% [1.2] vs 42.1% [2.4], and PHQ-9: 67.2% [2.8] vs 43.8% [1.2] vs AD 51.4% [2.4]; all  $p < 0.0001$ .

#### Discussion

After adjusting for confounders, this study population demonstrated that patients with CSU experience worse health outcomes, more mental comorbidities and overall higher humanistic burden compared to PSO and AD

respectively.

**Figure 1: Adjusted mean Mental (MCS) and Physical (PCS) component summary scores in chronic spontaneous urticaria patients relative to psoriasis and atopic dermatitis**



\*p<.0001; based on paired comparison of CSU vs PSO and CSU vs AD

MCS and PCS scores in the US population have a mean of 50 and a standard deviation (SD) of 10. Lower scores mean worse status.

AD: Atopic Dermatitis; CSU: Chronic Spontaneous Urticaria; MCS: Mental Component Score; PCS: Physical Component score; PSO: Psoriasis

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