Real-World Psychosocial and Economic Burden of Atopic Dermatitis Related to Disease Severity and Use of Systemic Therapy: Results from a Multicountry Study

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OBJECTIVE

In this analysis, we describe the psychosocial and economic burden of atopic dermatitis (AD) relative to patients' disease severity and current systemic therapy use

CONCLUSIONS



This analysis of more than 1400 adults with AD demonstrated that a psychosocial and economic burden exists among patients with AD



The burden is higher for patients with more severe However, even for patients receiving systemic therapy, patient burden remained high on most measures



treatments to improve patients' psychosocial outcomes and reduce the economic burden of AD

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INTRODUCTION

- Patients with AD experience a substantial and multidimensional burden of disease, including impacts on mental health and financial costs¹
- However, patterns in the psychosocial and economic burden of AD by disease severity and treatment are not well understood
- MEASURE-AD was a cross-sectional, 28-country study that assessed the burden of disease in patients with physician-confirmed moderate to severe AD who were either receiving systemic therapy or were eligible for systemic therapy
- Primary study findings have been previously presented²

METHODS

- MEASURE-AD recruited patients with AD aged ≥12 years between December 2019 and December 2020 from Western Europe, Eastern Europe, the Middle East, Asia, Australia, Canada, and Latin America
- Here we report analyses for adults (aged ≥18 years)
- Psychosocial burden assessments included
- Mental health status, assessed using the 12-Item Short Form Health Survey Mental Component Summary (SF-12 MCS) score

Clear Mild Moderate Severe (n = 38) (n = 218) (n = 338) (n = 196)

Disease Severity (EASI) Category

- Anxiety and depression, characterized by the proportions of patients with Hospital Anxiety and Depression Scale (HADS) anxiety (HADS-A) and depression (HADS-D) subscale scores ≥8
- Economic burden assessments included
- Financial cost due to AD, characterized by the median patient-reported cost of healthcare-related expenses and everyday necessities related to AD
- Work Productivity and Activity Impairment (WPAI) components and hours missed from work in the past 7 days
- Healthcare resource utilization, assessed by extra or unscheduled visits to the office/clinic of the study doctor in the past 6 months and overall number of healthcare visits in the past 6 months
- Results were presented by AD severity level (Eczema Area and Severity Index [EASI] of clear [0], mild [0.1–5.9], moderate [6.0–22.9], and severe [23.0–72.0])³ and current systemic therapy use
- Differences were analyzed using Kruskal-Wallis tests and chi-square tests, as appropriate

RESULTS

- Among 1434 adult patients with AD, mean age was 39.1 years (range, 18–94 years), 52.2% (n = 748) were male, and 60.5% (n = 868) were employed
- Of 1428 patients with EASI data, AD severity was rated as clear, mild, moderate, and severe for 81 (5.7%), 364 (25.5%), 621 (43.5%), and 362 (25.4%) patients, respectively
- Patients with worse disease severity had significantly worse mental health status and were much more likely to meet cutoff scores for depression and anxiety (Figure 1)
- Similarly, patients with worse disease severity had significantly higher financial costs, more missed hours from work, greater impairment of work productivity and activity, and more extra or unscheduled and overall healthcare visits in the past 6 months (Figures 2 and 3)

Figure 2. Financial Costs

and Healthcare Visits by

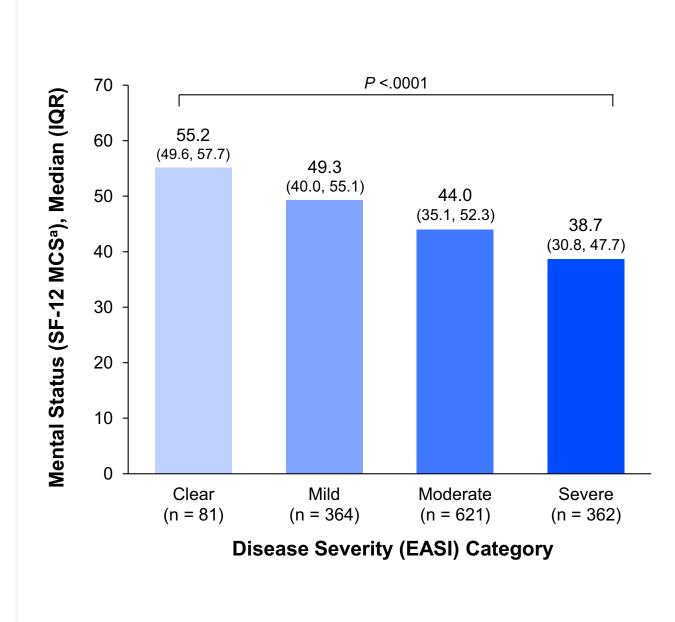
Disease Severity Level

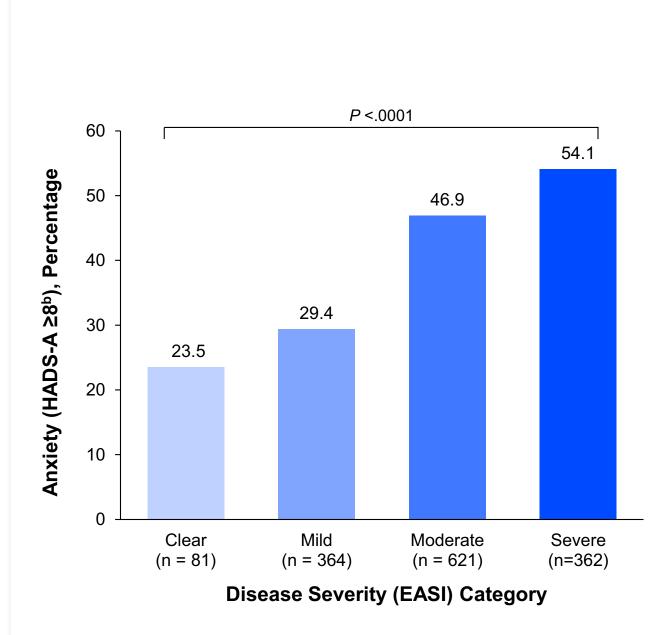
Mild (n = 364)

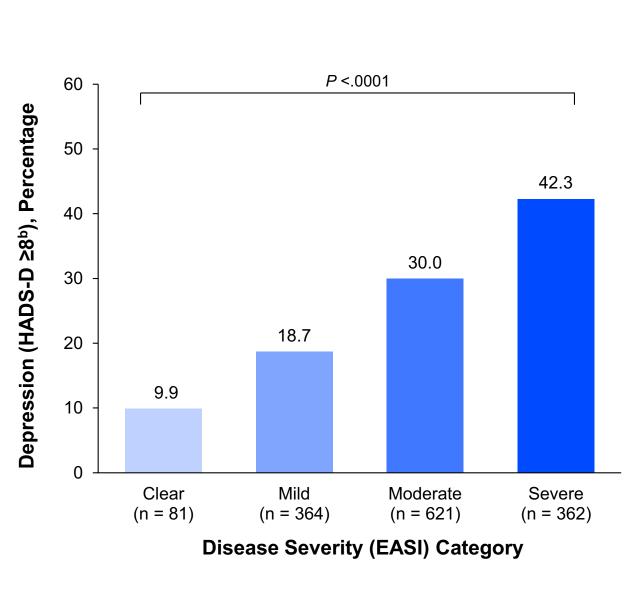
Clear Mild Moderate Severe (n = 81) (n = 364) (n = 621) (n = 362)

- Among the 1434 patients, 813 (56.7%) were currently receiving systemic therapy, most commonly dupilumab (n = 468, 57.6%), systemic corticosteroids (n = 146, 18.0%), methotrexate (n = 124, 15.3%), or cyclosporine (n = 122, 15.0%)
- Patients not currently receiving systemic therapy (n = 620) had significantly worse mental health status and were more likely to meet cutoff scores for anxiety or depression than patients receiving systemic therapy (Figure 4)
- Among patients receiving systemic therapy, 491 (60.4%) were employed; among patients not receiving systemic therapy, 377 (60.8%) were employed
- Patients not currently receiving systemic therapy had significantly higher financial costs, more missed hours from work, greater impairment of work productivity and activity, and more extra or unscheduled healthcare visits in the past 6 months compared with patients receiving systemic therapy (Figures 5 and 6)

Figure 1. Psychosocial **Burden of AD by Disease Severity Level**







AD, atopic dermatitis; EASI, Eczema Area and Severity Index;

^aRange, 0–100; higher scores indicate better mental health.

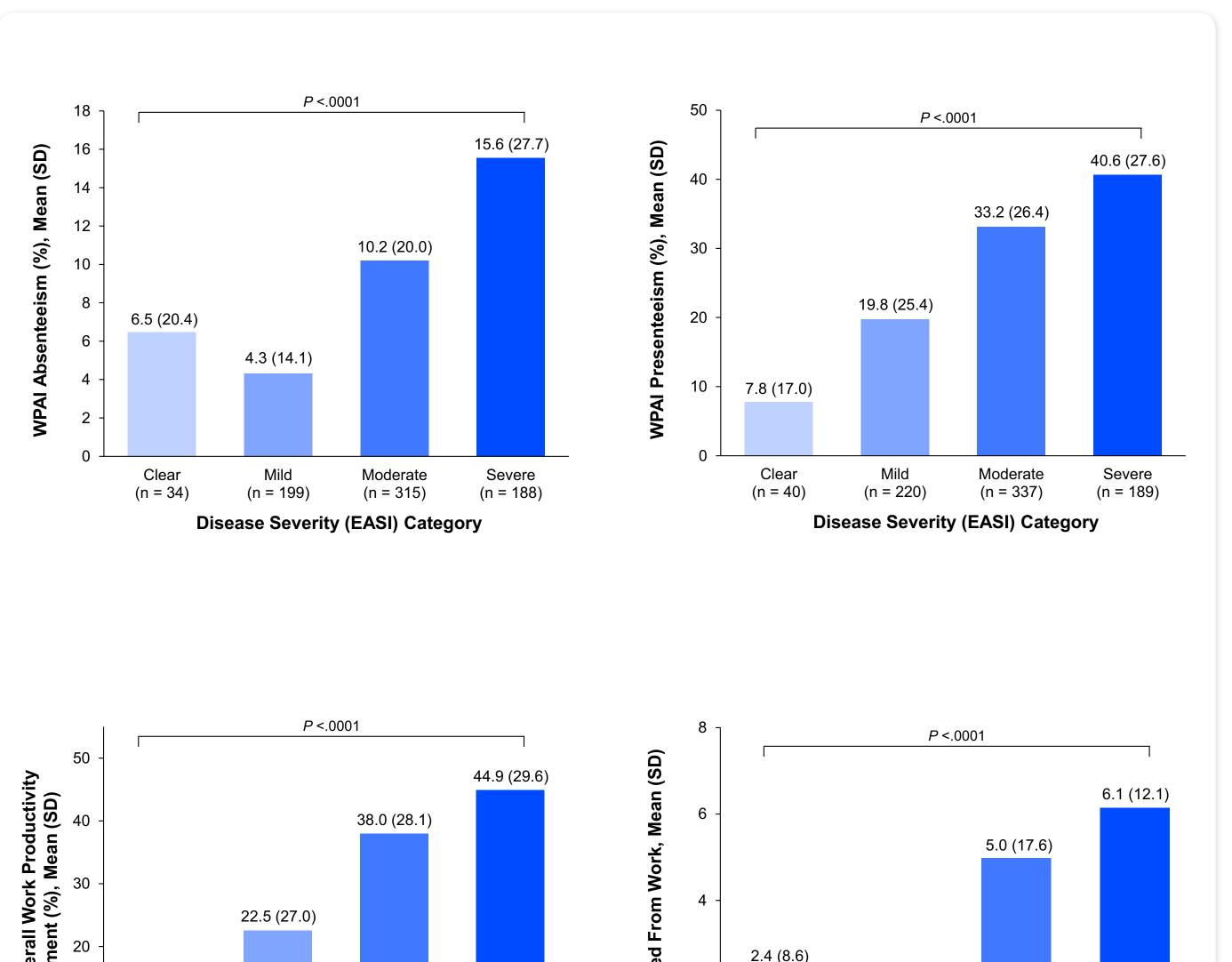
HADS-A and HADS-D.

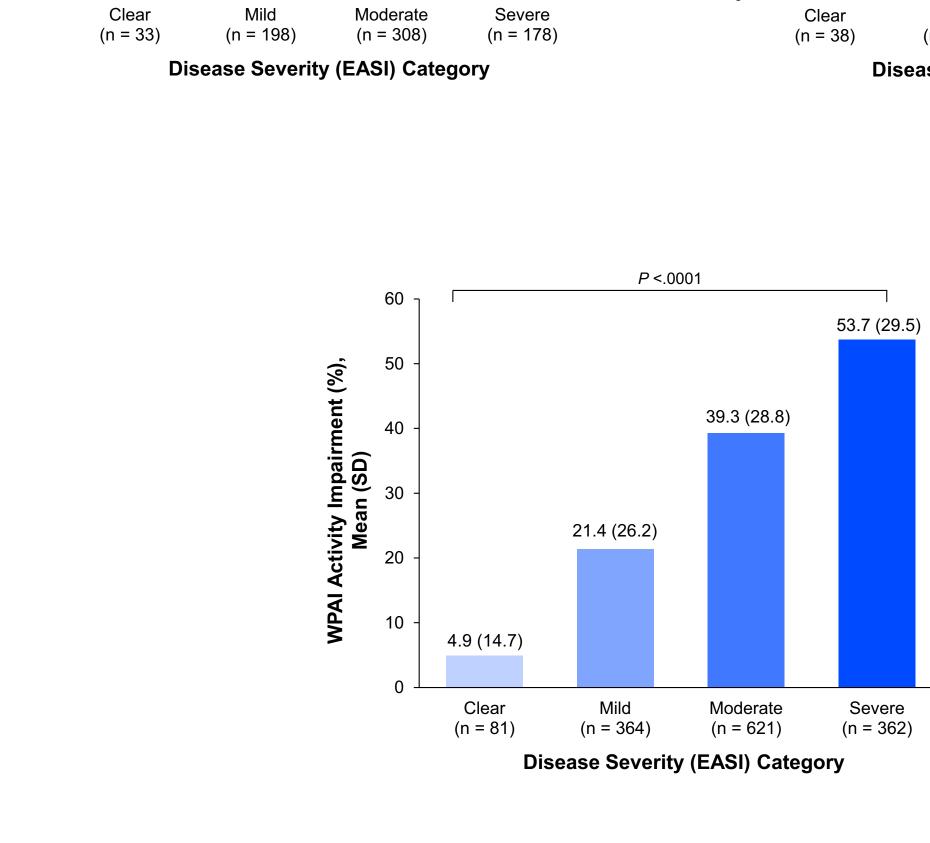
EASI severity levels: clear, 0; mild, 0.1–5.9; moderate, 6.0–22.9; severe, 23.0–72.0.

P values are based on Kruskal-Wallis tests for SF-12 MCS and on chi-square tests for

Clear Mild Moderate Severe (n = 81) (n = 364) (n = 621) (n = 362) **Disease Severity (EASI) Category** HADS, Hospital Anxiety and Depression Scale; HADS-A, HADS-Anxiety; AD, atopic dermatitis; EASI, Eczema Area and Severity Index; IQR, interguartile range HADS-D, HADS-Depression; IQR, interquartile range (25th to 75th percentiles); (25th to 75th percentiles); USD, US dollars (currency conversion 2021). SF-12 MCS, 12-Item Short Form Health Survey Mental Component Summary. EASI severity levels: clear, 0; mild, 0.1–5.9; moderate, 6.0–22.9; severe, 23.0–72.0. P values are based on Kruskal-Wallis tests except for extra or unscheduled visits ^bScores of 0–7 are considered normal, and scores of ≥8–21 are borderline to abnormal.

Figure 3. Work Productivity and Activity Impairment by Disease Severity Level





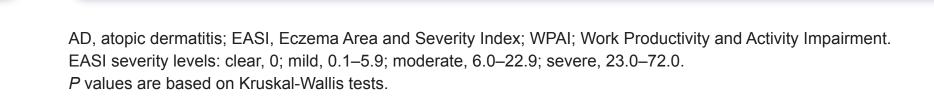
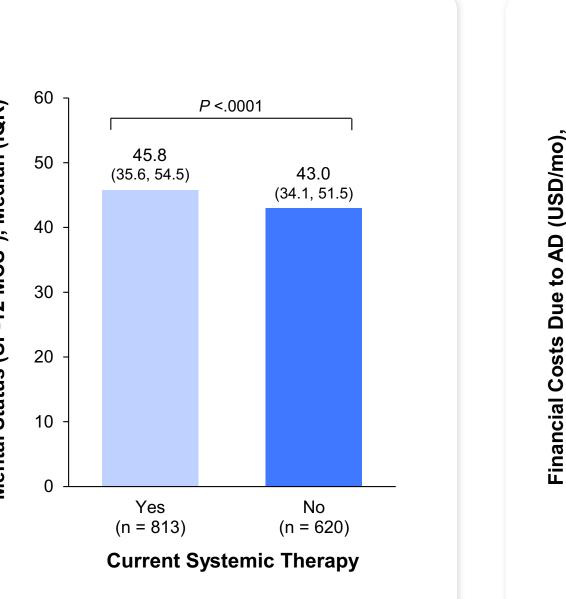
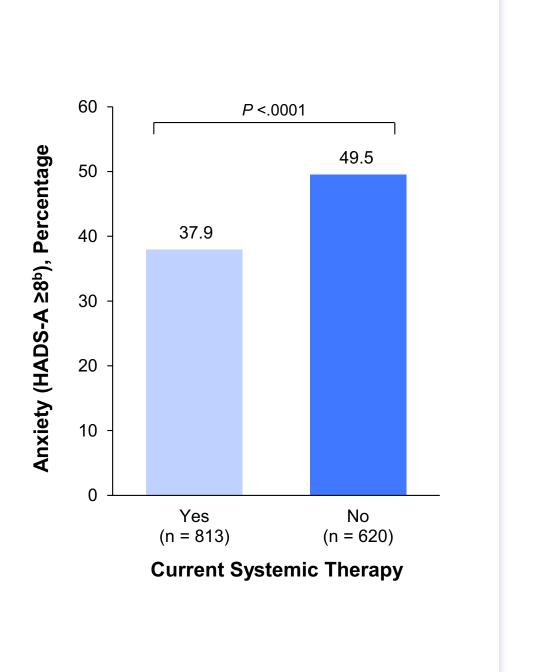
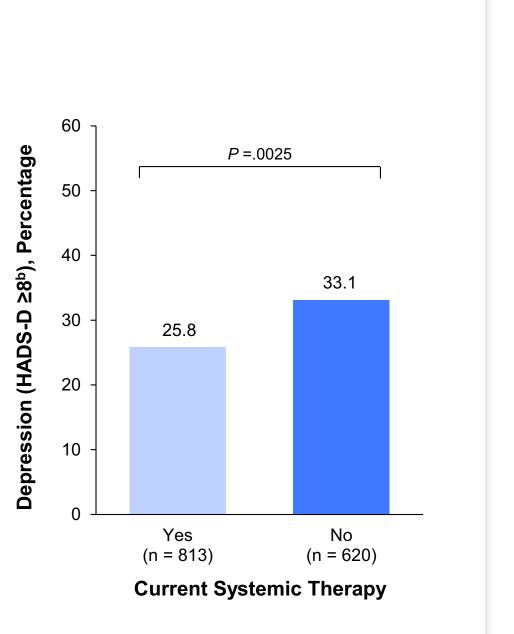


Figure 4. Psychosocial **Burden of AD by Current Use of** Systemic Therapy







AD. atopic dermatitis: HADS, Hospital Anxiety and Depression

Scale: HADS-A, HADS-Anxiety: HADS-D, HADS-Depression:

^aRange, 0–100; higher scores indicate better mental health.

borderline to abnormal.

square tests for HADS-A and HADS-D.

IQR, interquartile range (25th to 75th percentiles); SF-12 MCS,

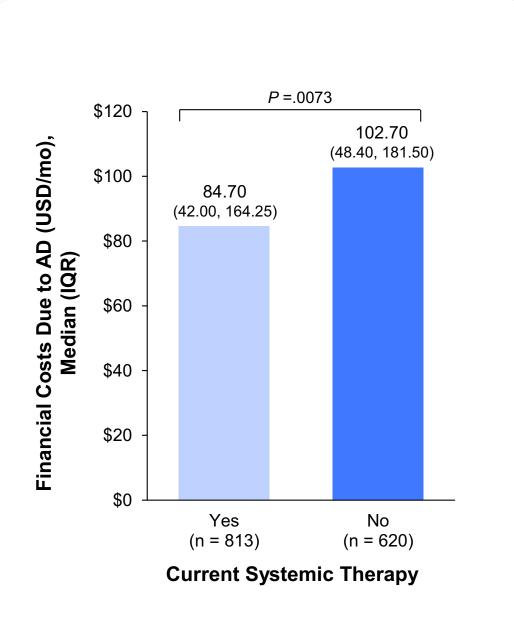
12-Item Short Form Health Survey Mental Component Summary.

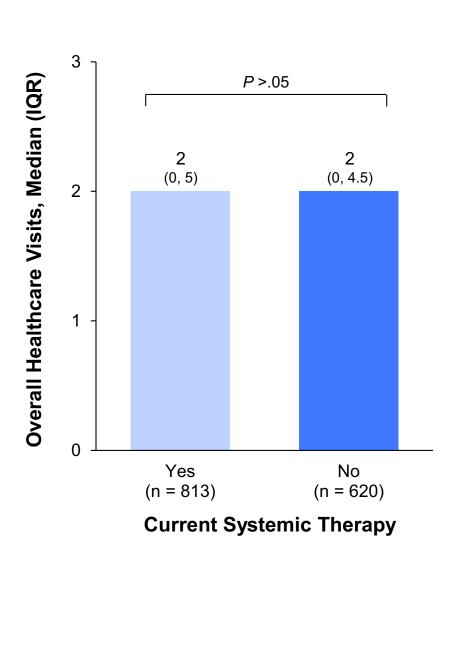
bScores of 0–7 are considered normal, and scores of ≥8–21 are

P values are based on Kruskal-Wallis tests for SF-12 MCS and on chi-

Costs and Healthcare Visits by Current Use of Systemic Therapy

Figure 5. Financial





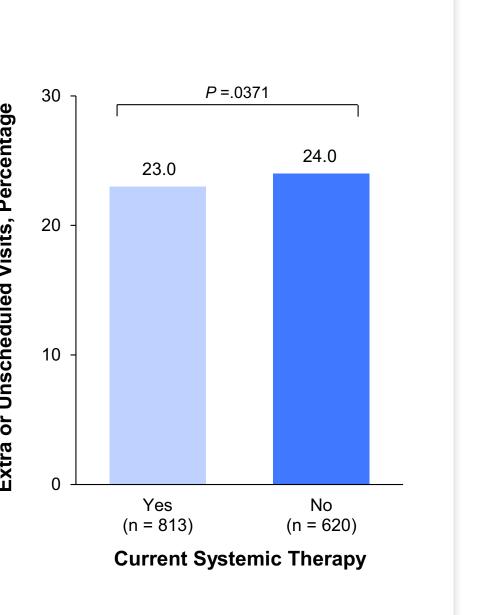
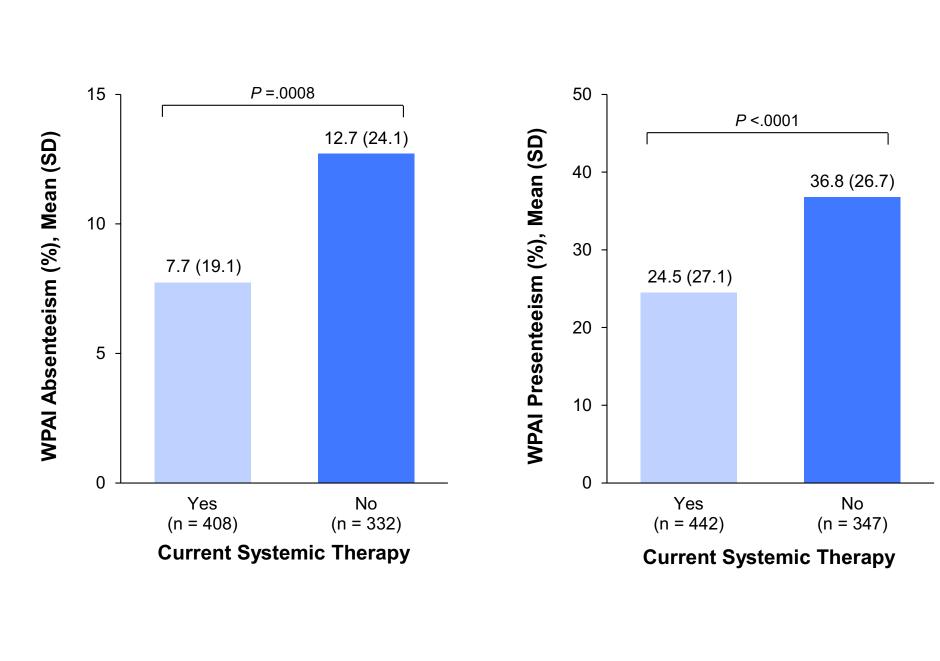
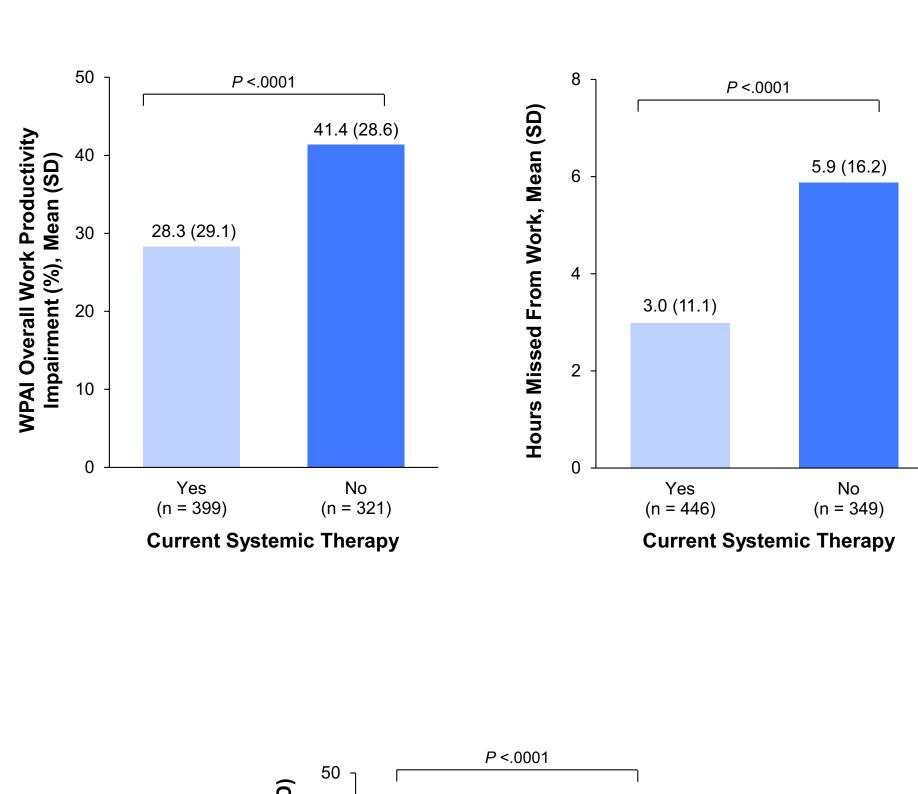
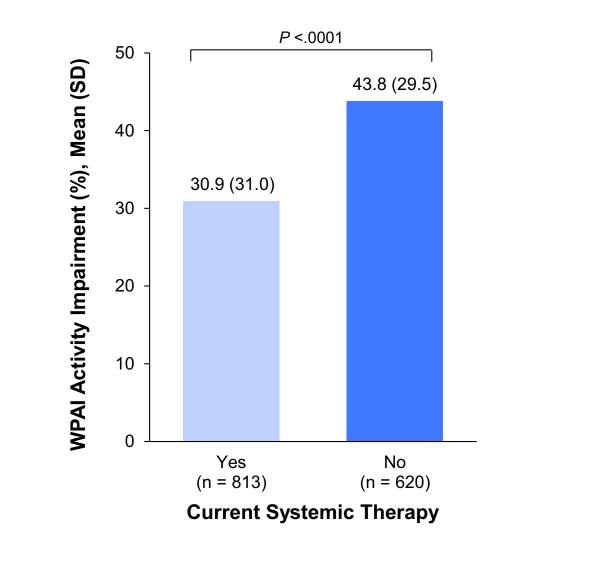


Figure 6. Work Productivity and Activity Impairment by Current Use of Systemic







AD, atopic dermatitis; IQR, interguartile range (25th to 75th percentiles); USD, US dollars (currency conversion 2021) P values are based on Kruskal-Wallis tests except for extra or unscheduled visits (chi-square tests).

AD, atopic dermatitis; WPAI; Work Productivity and Activity Impairment. P values are based on Kruskal-Wallis tests.