# Genital Involvement in Patients With Atopic Dermatitis is Associated With Sexual Difficulties and Higher Disease Burden: Results From a Real-World Multicountry Cohort Study (MEASURE-AD)

Kilian Eyerich<sup>1,2</sup>, Wei Jing Loo<sup>3</sup>, Brian M. Calimlim<sup>4</sup>, Wan-Ju Lee<sup>4</sup>, Shirley H. Chen<sup>5</sup>, Cristina Sancho Sanchez<sup>4</sup>, Felix Lauffer<sup>6</sup>

<sup>1</sup>Department of Dermatology, Faculty of Medicine, Albert-Ludwigs-Universität Freiburg, Freiburg, Germany; <sup>2</sup>Karolinska Institutet and Karolinska University Hospital, Stockholm, Sweden; <sup>3</sup>DermEffects, London, ON, Canada; <sup>4</sup>AbbVie Inc., North Chicago, IL, USA; <sup>5</sup>Tigermed-BDM Inc., Somerset, NJ, USA; <sup>6</sup>Department of Dermatology and Allergy, Technical University of Munich, Munich, Germany

## OBJECTIVE

Evaluate the burden of disease and quality of life among patients with genital involvement of atopic dermatitis (AD)

## CONCLUSIONS



Patients with genital AD experienced a higher disease burden and greater impairment of quality of life with a considerable impact on sexual function, self-esteem, self-confidence, and intimacy compared with patients without genital involvement



Healthcare providers should proactively inquire about symptoms involving the genital area as patients with AD may be reluctant to broach the subject due to embarrassment, stigmatization, and/or fear of judgment



To optimize patient outcomes and well-being, the burden associated with genital AD should be considered during treatment decision-making discussions between patients and physicians

AbbVie funded this study and participated in the study design, research, analysis, data collection, interpretation of data, reviewing, and approval of this poster for submission. All authors had access to the relevant data and participated in the drafting, review, and approval of this poster. No honoraria or payments were made for authorship. AbbVie and authors thank all the trial investigators and the patients who participated in this clinical trial. Medical writing support was provided by Akua Adu-Boahene, MD, MPH, and Jennifer A. Jiménez. PhD. of JB Ashtin, and funded by AbbVie.

K. Eyerich has received grants and/or personal fees from AbbVie, Almirall, BMS, Janssen, LEO, Lilly, Novartis, Sanofi, and UCB. W.J. Loo has served as an investigator, speaker, advisor/consultant for and/or received grants/honoraria from AbbVie, Arcutis, Amgen, Bausch Health, BMS, Celgene, Galderma, GSK, Janssen, LEO, Lilly, Meiji Seika, Novartis, Sanofi-Genzyme, Sun, UCB, and Valeant. B.M. Calimlim, W-J. Lee, and C. Sancho Sanchez are full-time employees of AbbVie Inc. and may hold AbbVie stock or stock options. S.H. Chen is a full-time, salaried employee of Tigermed-BDM Inc., which provided statistical analysis support that was funded by AbbVie. F. Lauffer has received grants and personal fees from AbbVie, Amgen, Almirall, BI, BMS, Janssen, Novartis, LEO, Lilly, Pfizer, Roche, Sanofi, UCB, and Union.

References . Begolka WS, et al. *Dermatitis*. 2021;32:S62–S70. 2. Laughter MR, et al. *Br J Dermatol*. 2021;184:304–09. 3. Silverberg JI, et al. Ann Allergy Asthma Immunol. 2018;121:340-7

Presented at the 2022 Revolutionizing Atopic Dermatitis (RAD) Virtual Conference, 11 December 2022

### BACKGROUND

- AD is a chronic, relapsing inflammatory skin disease characterized by
- painful, erythematous, and pruritic lesions<sup>1,2</sup> AD has been associated with the highest quality-of-life burden of all skin diseases globally<sup>2</sup>
- AD can have a negative impact on sleep, work productivity, daily functioning, emotional state, and economic well-being<sup>1–3</sup>
- Studies investigating the genital involvement of AD are relatively limited; the prevalence of genital AD and its impact on disease burden and quality of life, especially sexual function, have not been well characterized
- MEASURE-AD sought to describe the multidimensional burden associated with moderate-to-severe AD

## **METHODS**

#### **Study Design and Treatment**

Middle East, and Latin America

- MEASURE-AD is a cross-sectional, noninterventional cohort study that enrolled patients from 28 countries in Europe, Canada, Asia, the
- Enrolled patients were aged ≥12 years with a physician-confirmed diagnosis of moderate-to-severe AD and were receiving or eligible to receive systemic therapy
- Patients were enrolled between December 2019 and December 2020. Data were collected during a single clinic visit
- Patients ≥16 years were included in this post hoc analysis (ie, enrolled patients aged 12–15 years were excluded)

#### **Assessments**

- Genital involvement was assessed using the SCORing of AD (SCORAD) index
- Extent and severity of AD were evaluated according to the Eczema Area and Severity Index (EASI), body surface area (BSA), and the validated Investigator Global Assessment for AD (vIGA-AD™)
- Pruritus was assessed using the Worst Pruritus Numeric Rating Scale
- Quality-of-life assessments were conducted using the Dermatology Life Quality Index (DLQI)

#### **Analysis**

- Statistical analyses were based on observed data
- Association between disease burden and genital AD was analyzed by applying Kruskal-Wallis and Chi-square tests to continuous and categorical variables, respectively
- To minimize the potential effect of confounding, a sensitivity analysis was conducted among patients with 3 other AD regions, per SCORAD (head/neck, trunk, and limbs)

### RESULTS

- 1474 patients (708 [48.0%] females; 766 [52.0%]
- males) were identified in the analysis (Table) - Mean (SD) age of 38.0 (16.5) years
- AD duration of 23.3 (15.4) years
- 245 (16.6%) patients were identified as having genital AD; 1229 (83.4%) patients had no genital AD involvement
- When compared with patients without genital AD, patients with genital involvement had significantly greater (P < .0001 for all; **Table**; **Figure 1**)
- Extent and severity of disease (higher EASI scores)
- Itch (higher WP-NRS scores)
- Body regions affected by AD
- BSA involvement
- Disease severity (higher vIGA-AD scores) - Impaired quality of life (higher total DLQI scores)
- Sexual difficulties The results of the sensitivity analyses were generally similar to those of the main analyses - Higher mean EASI, BSA, and DLQI scores were still observed in the group with genital AD compared with those without genital involvement

More patients with genital AD reported

impairments in sexual, emotional, and

involvement, including (P < .0001 for all;

Embarrassment/self-consciousness

Affected social/leisure activities

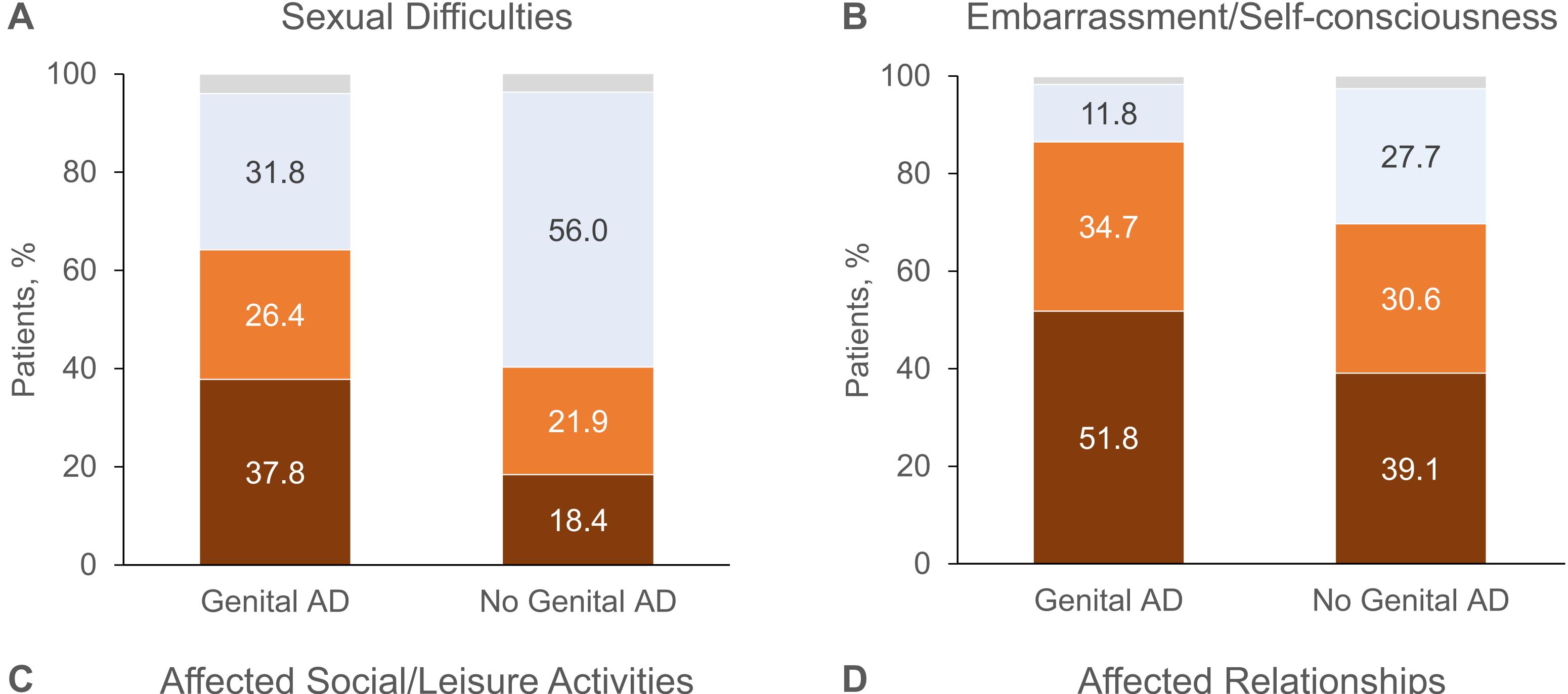
Affected relationships

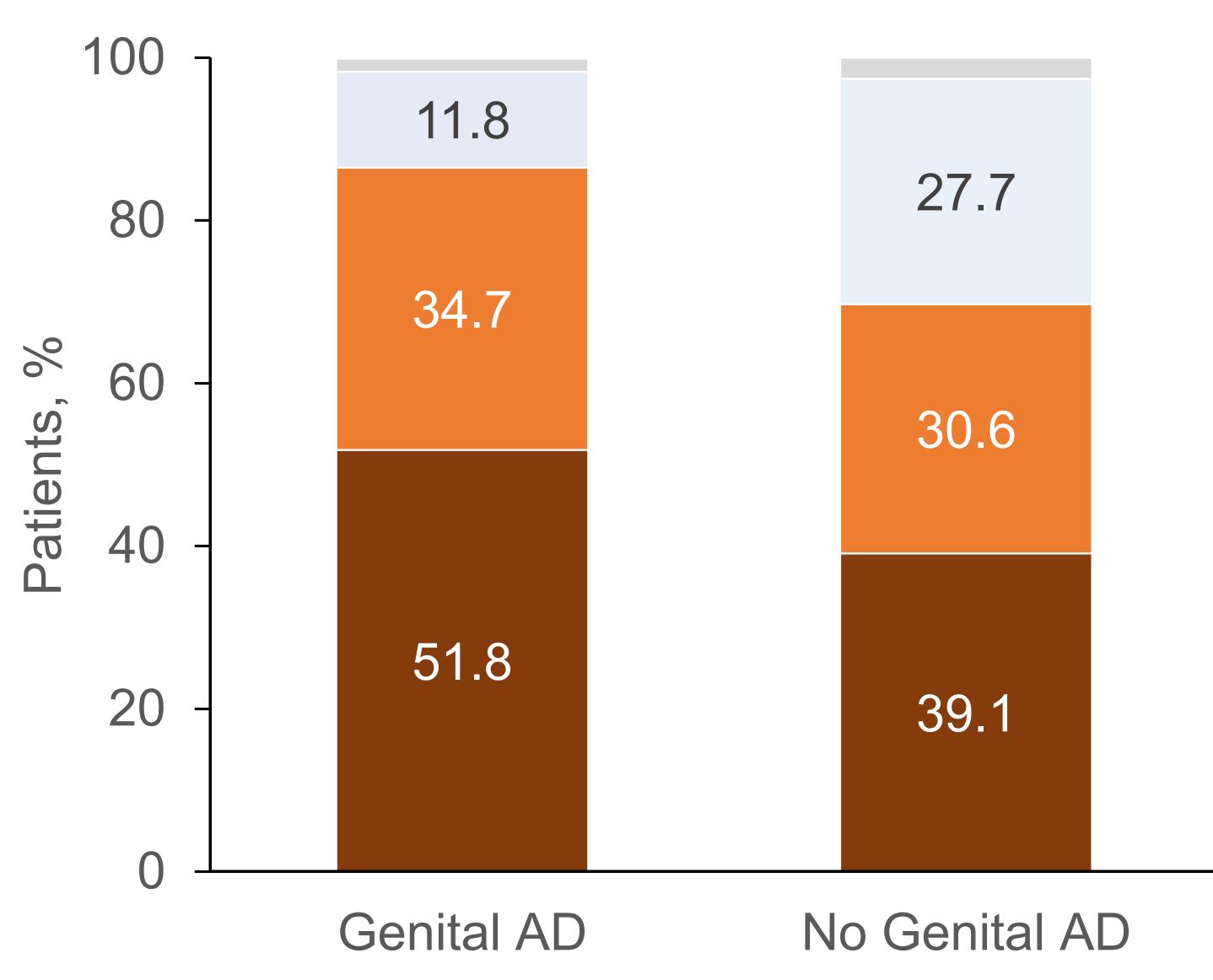
Figure 2)

social functioning than those without genital

 There were no differences in WP-NRS and vIGA-AD scores between the 2 groups

## Figure 2. Impact of Genital AD on (A) Sexual Difficulties, (B) Embarrassment/Self-consciousness, (C) Affected Leisure/Social Activities, and (D) Affected Relationships Based on DLQI\*





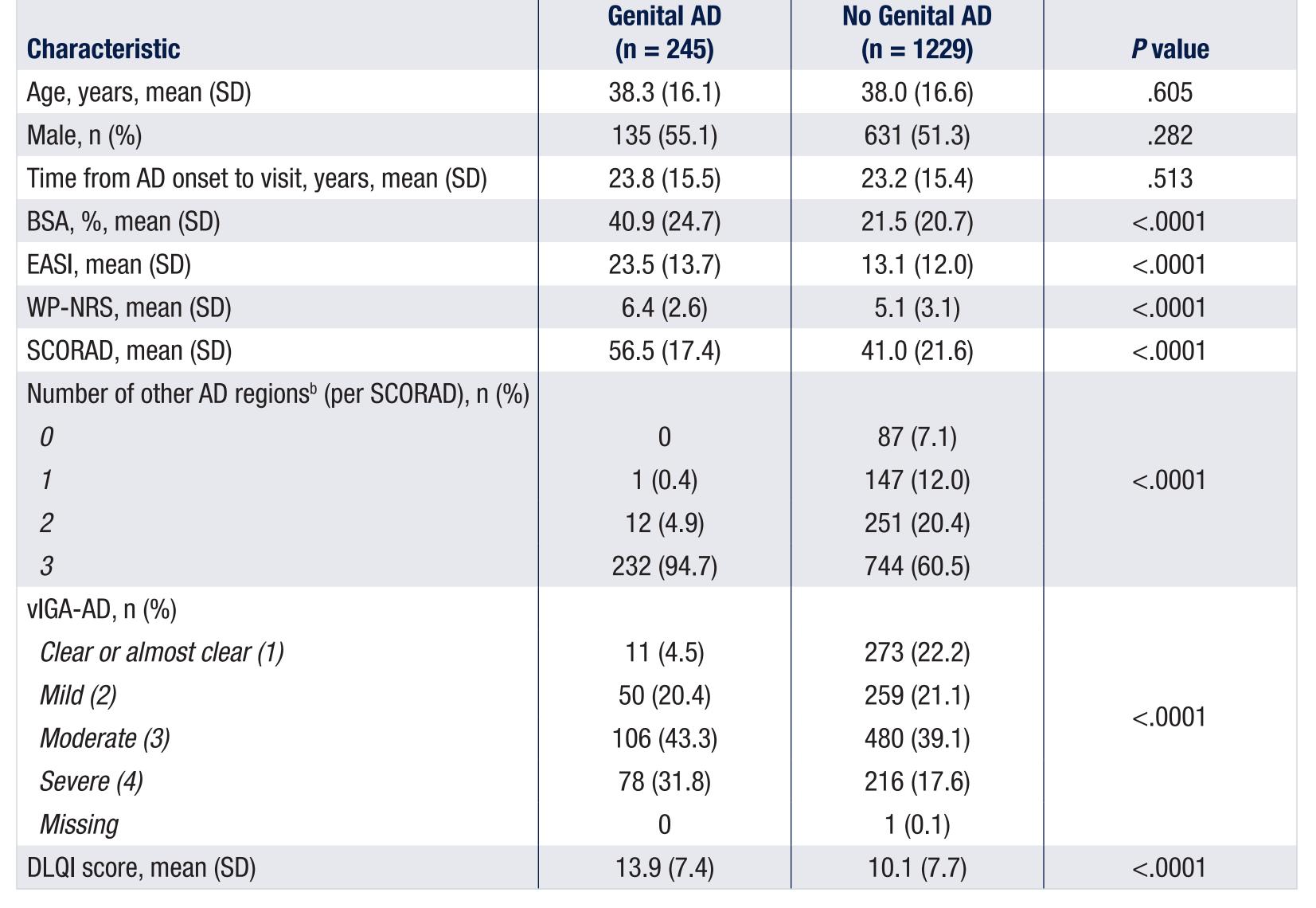
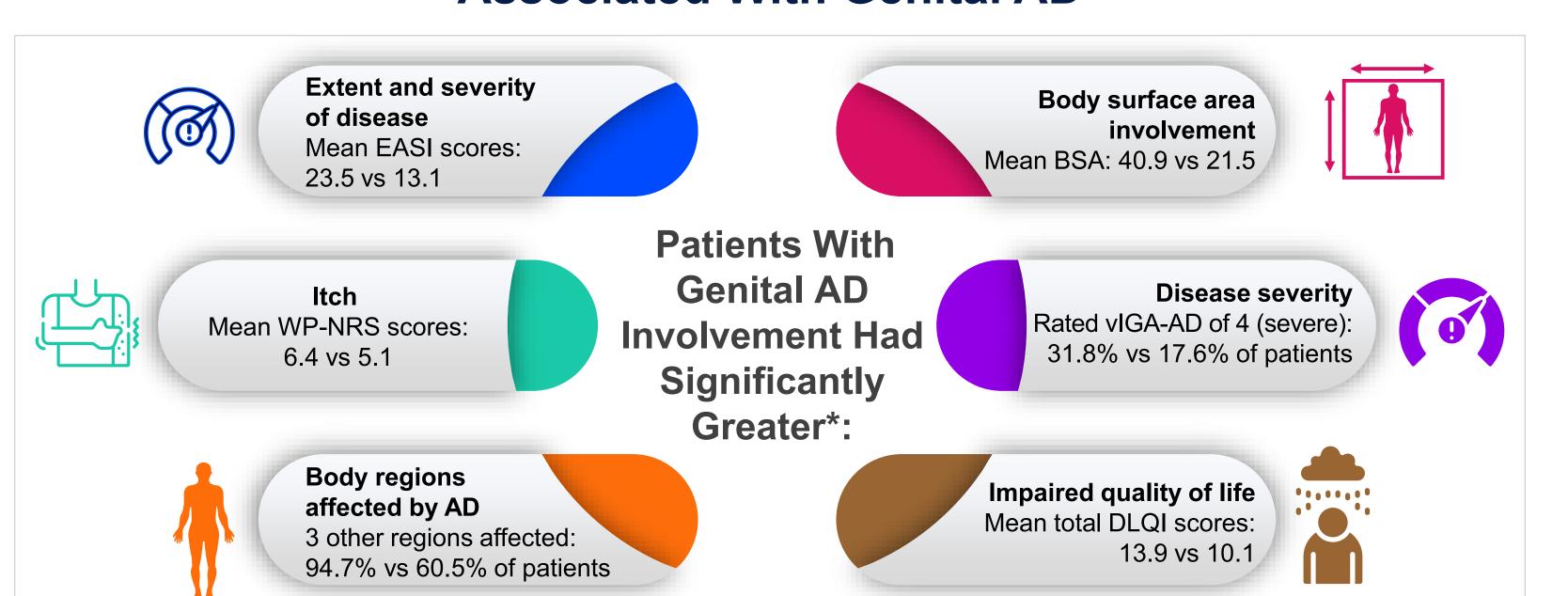
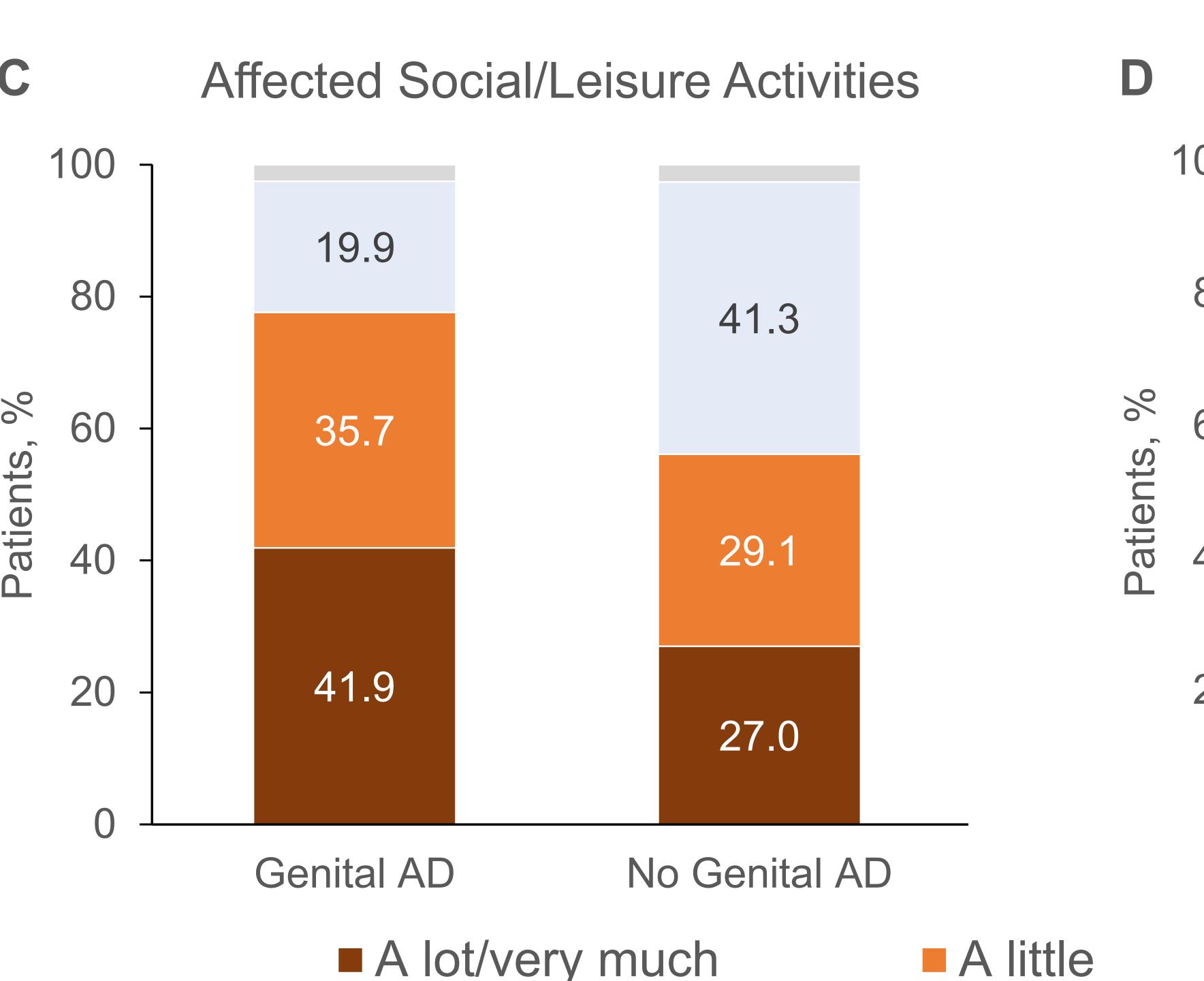


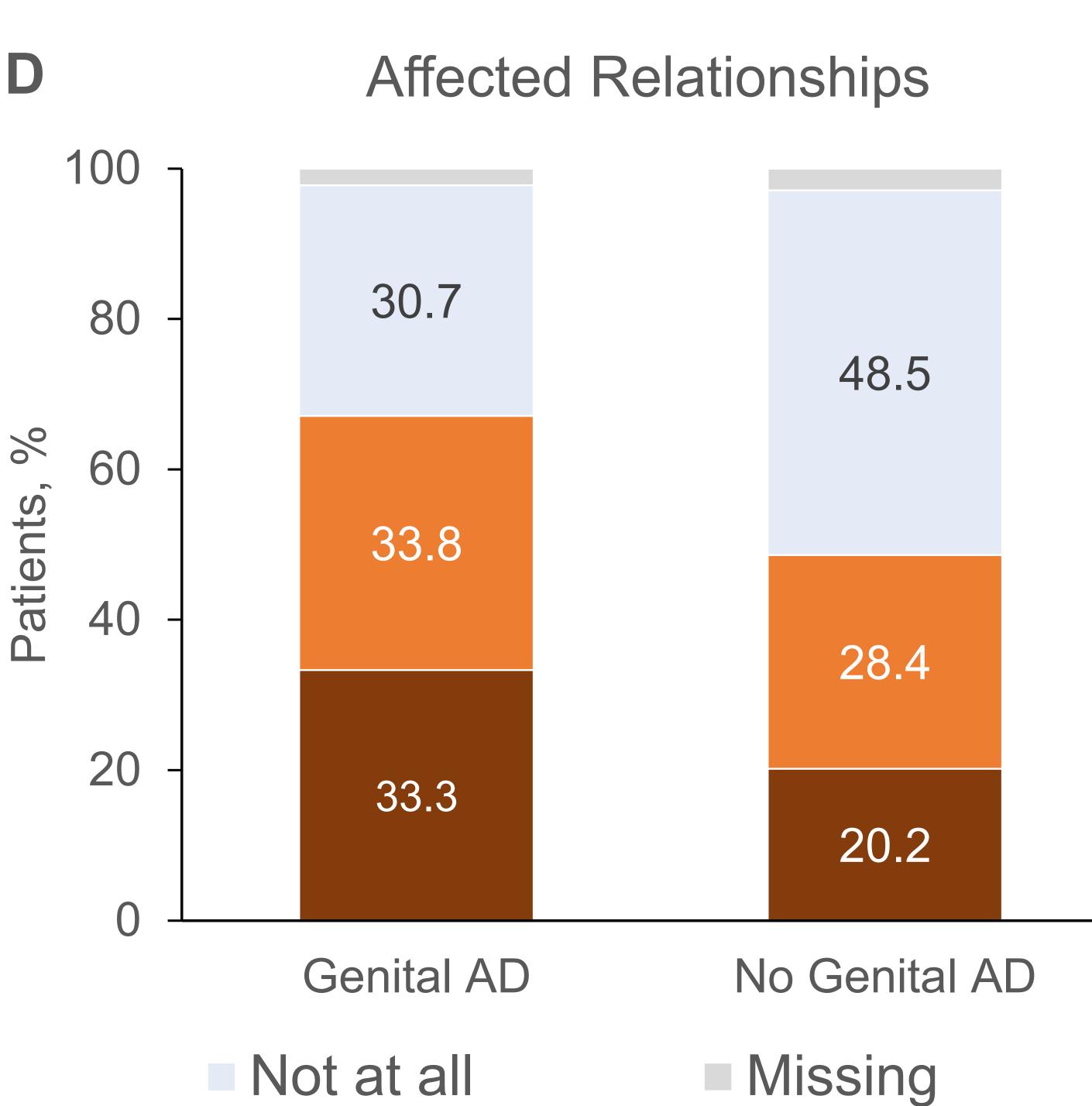
Table. Patient Demographic and Disease Characteristics<sup>a</sup>

AD, atopic dermatitis; BSA, body surface area; DLQI, Dermatology Life Quality Index; EASI, Eczema Area and Severity Index; SCORAD, SCORing of AD; vIGA-AD, validated Investigator Global Assessment for Atopic Dermatitis; <sup>a</sup>Means and percentages were calculated based on non-missing values. <sup>b</sup>Other AD regions consists of any of the following: head/neck, trunk, and limbs.

## Figure 1. Greater Disease Burden and Quality of Life Impact **Associated With Genital AD**







AD, atopic dermatitis; BSA, body surface area; DLQI, Dermatology Life Quality Index; EASI, Eczema Area and Severity Index; SCORAD, SCORing of AD; vIGA-AD, validated Investigator Global Assessment for Atopic Dermatitis; WP-NRS, Worst Pruritus Numerical Rating Scale \*P <.0001 for all when compared with patients without genital AD.

AD, atopic dermatitis; DLQI, Dermatology Life Quality Index. \*P <.0001 for genital AD vs no genital AD groups across all categories.