Dupilumab-treated patients with prurigo nodularis report disease control and treatment satisfaction: 6-month results from the RELIEVE-PN study

Sarina B Elmariah[1], Ryan B Thomas[2], Donia Bahloul[3], Joseph Zahn[2], Samreen Arshad[4], Min Yang[5], Bruno Martins[5], Allister Ho[5], Jiaxuan Liu[5], Shawn G Kwatra[6]

[1]Department of Dermatology, University of California San Francisco, San Francisco, CA, USA; [2]Regeneron Pharmaceuticals, Inc., Sleepy Hollow, NY, USA; [3]Sanofi, Gentilly, France; [4]Sanofi, Cambridge, MA, USA; [5]Analysis Group, Inc., Boston, MA, USA; [6]Department of Dermatology, University of Maryland School of Medicine, Baltimore, MD, USA; Maryland Itch Center, University of Maryland School of Medicine, Baltimore, MD, USA

Prurigo nodularis

Conclusions

- **The results from this real-world RELIEVE-PN study demonstrate improvements in patient reported disease control, reduction in concomitant medication use, and treatment satisfaction in dupilumab treated patients with PN as early as 1 month and further maintained 6 months post treatment.**

Objective

- **To evaluate improvements in disease control, concomitant medication use, and treatment satisfaction among the dupilumab-treated adult patients with PN in the US from a real-world setting**

Background

- Dupilumab, a fully human VelocImmune®-derived monoclonal antibody, is the first approved treatment in the United States (US) for patients aged ≥18 years with prurigo nodularis (PN).[1]
- Dupilumab demonstrated a significant improvement in multiple symptom measures (including itch and skin pain) in the pivotal phase 3 clinical trials—LIBERTY PN-PRIME (NCT04183335) and PRIME2 (NCT04202679).[2] However, the effectiveness of dupilumab in the real-world settings has not yet been well established.

Methods

- RELIEVE-PN (eaRly rEal-worLd patIent EValuation for DupixEnt in Prurigo Nodularis) is an ongoing, longitudinal, prospective real-world patient survey study that was initiated to demonstrate the real-world effectiveness of dupilumab for treatment of PN.

RELIEVE-PN study design

Study design and population

- Pre-post longitudinal, prospective survey study
- Inclusion criteria
  - Adult patients with PN enrolled into the dupilumab patient support program
  - Provided informed consent
  - Completed baseline survey[a]
  - Initiated dupilumab
- Exclusion criteria
  - Have used dupilumab before baseline
  - Enrolled in clinical trials over past 6 months
  - Not initiating dupilumab within 8 weeks post the baseline survey

Data collection time points

Pre Dupilumab baseline survey

Weekly follow-up emails for up to 8 weeks to identify dupilumab initiation date

Post Dupilumab initiation surveys

M 1 | M 2 | M 3 | M 6 | M 9 | M 12 | M 18 | M 24

Study outcomes

- Disease control: PCT; 14 days recall period; range: 0 to 20; scores ≥10 indicate controlled chronic prurigo
- Patient-reported concomitant medication use in the past 4 weeks
- Patient-reported satisfaction with the current treatment(s): 7-point Likert scale

Extremely satisfied | Very satisfied | Somewhat satisfied | Neither satisfied nordissatisfied | Somewhat dissatisfied | Very dissatisfied | Extremely dissatisfied

Statistical analysis

- Descriptive analyses were conducted to summarize the study outcomes.
- Continuous variables were summarized with means and SDs, while categorical variables were summarized as frequencies and percentages.
- The mean scores for the outcomes were compared to baseline values using t-tests and categorical outcomes were compared using Chi-Square/Fisher's Exact test.
- A subgroup analysis was conducted on patients who indicated they continued taking dupilumab at the time of each follow-up survey.

[a]The baseline survey collected data on socio-demographic characteristics, disease characteristics, medical history, PN sign/symptoms, prior treatment history and experiences, psychological wellbeing, health-related quality of life, employment status, treatment satisfaction, and patient global assessments.
PCT, prurigo control tool; PN, prurigo nodularis; SD, standard deviation.

RESULTS

- Of the 181 patients who completed the baseline survey and initiated dupilumab, 156, 130, and 85 patients completed the month 1, 3, and 6 surveys, respectively.
- At month 1, 3 and 6, 149, 125 and 67 patients, respectively, remained on dupilumab treatment.
- The most commonly reported reasons for stopping dupilumab therapy were: experienced side effects, dupilumab did not seem to work, my doctor told me to stop taking it, worried about potential side effects, and issue with health insurance coverage.

Demographic and medical history at baseline

Overall cohort ***N*=181**

Mean age (SD): **57.9 (14.5)** years

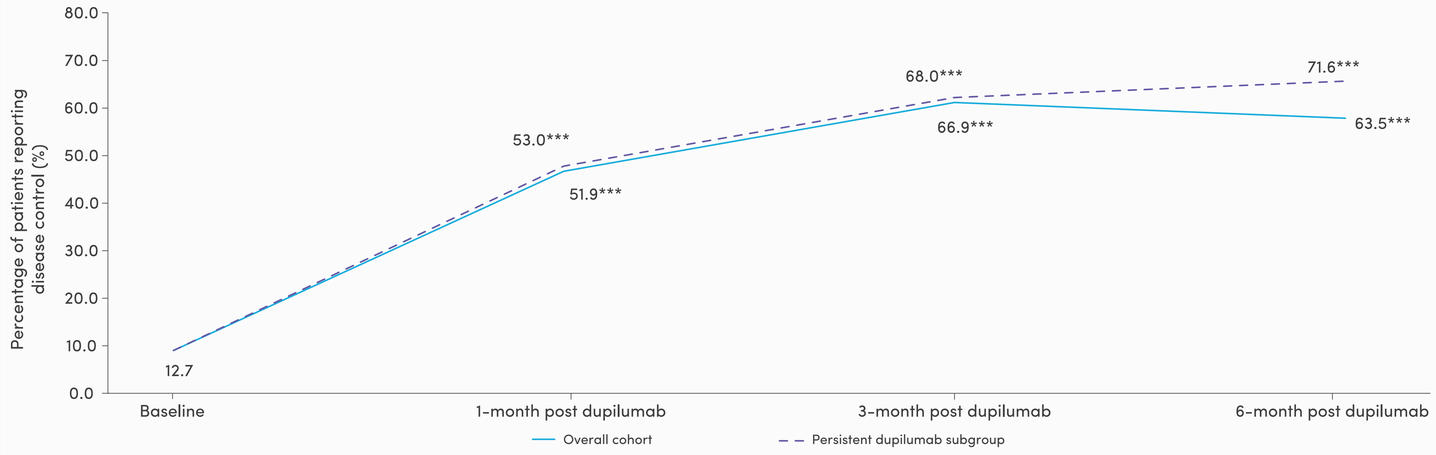
78.5% female

Mean (SD) time since diagnosis: **1.1 (4.1)** years[a]

[a]Calculated among 158 initiators that remembered when they were diagnosed of prurigo nodularis.

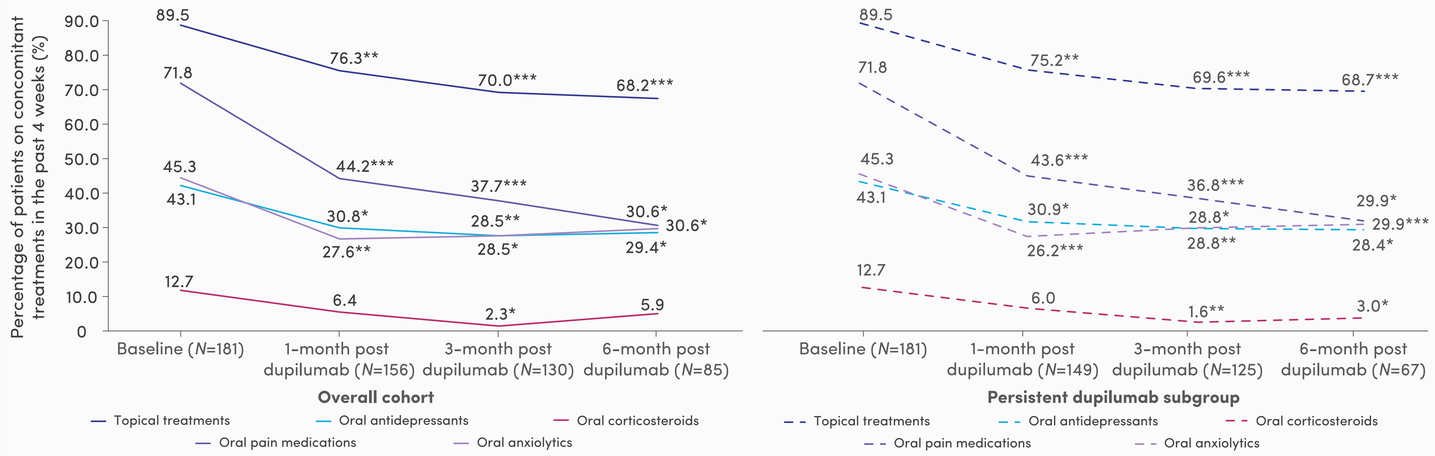
Real-world effectiveness of dupilumab

A significantly greater proportion of patients had well-controlled chronic prurigo at months 1, 3 and 6 after dupilumab initiation compared with baseline (p<0.001) in both overall cohort and in the persistent dupilumab subgroup.



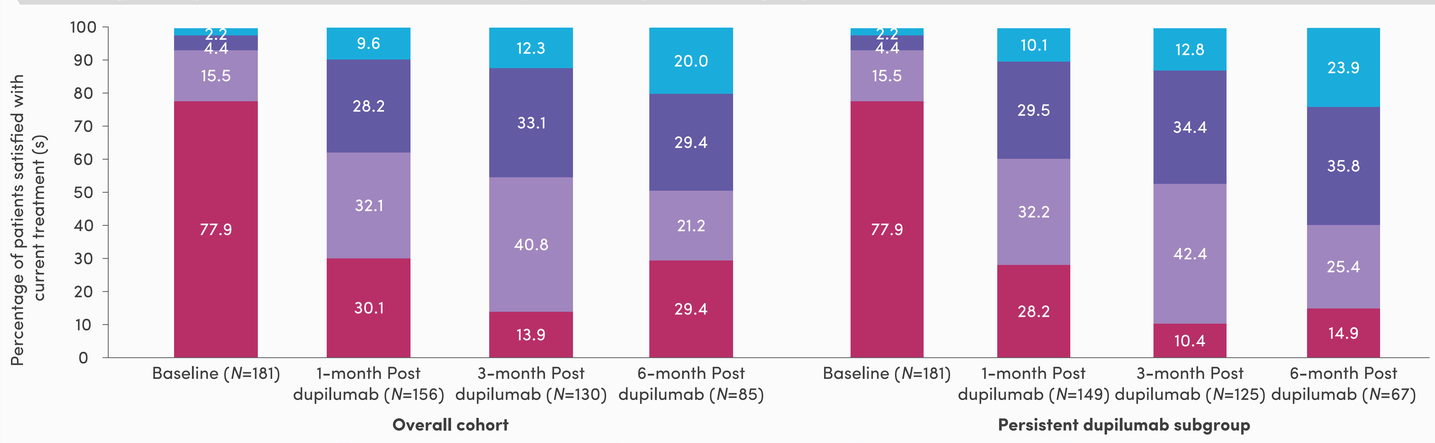
***p<0.001.

In both overall cohort and the persistent dupilumab subgroup, the proportion of patients on concomitant treatments in the past 4 weeks decreased over time after dupilumab initiation.



*p<0.05; **p<0.01; ***p<0.001. *N* represents the size of the population.

A significantly greater number of patients were satisfied with their current treatment(s) at months 1, 3 and 6 after dupilumab initiation compared with baseline (p<0.001), both in overall cohort and in the persistent dupilumab subgroup.



p<0.001. Not satisfied categories: "Neither satisfied nor dissatisfied," "Somewhat dissatisfied," "Very dissatisfied," and "Extremely dissatisfied." *N* represents the size of the population.

References
1. Dupilumab – Product Information. https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/761055s044lbl.pdf. Accessed Sep 11, 2025.
2. Yosipovitch G, *et al. Nat Med.* 2023;29(5):1180–1190.

Acknowledgments and funding sources
The authors would like to thank the Global Publication Leads, Leah Granby, MsPH, from Sanofi and Julie Frisolone, PharmD, from Regeneron Pharmaceuticals Inc., for their contributions to the development of this poster. Medical writing/editorial assistance was provided by Purushottam Shiranal and Dr. Kaushik Subramanian of Sanofi, according to the Good Publication Practice guidelines.
The study was sponsored by Sanofi and Regeneron Pharmaceuticals, Inc.

Disclosures
Sarina B Elmariah – Sanofi, Regeneron Pharmaceuticals, Galderma, Celldex, Disc Medicine, Bambusa Therapeutics, Novartis, Pfizer, Eli Lilly and New Frontier Bio – consultant, advisory board and lectures; **Ryan B Thomas** and **Joseph Zahn** – Regeneron Pharmaceuticals Inc. – employees and shareholders; **Donia Bahloul** and **Samreen Arshad** – Sanofi – employees and may hold stock and/or stock options in the company; **Bruno Martins, Min Yang, Jiaxuan Liu,** and **Allister Ho** – Analysis Group – employees and may hold stock and/or stock options in the company; **Shawn G Kwatra** – AbbVie, Arcutis Biotherapeutics, Aslan Pharmaceuticals, Celldex Therapeutics, Galderma, Genzada Pharmaceuticals, Incyte, Johnson & Johnson, Novartis, Pfizer, Regeneron Pharmaceuticals Inc., and Sanofi – advisory board member/consultant; Galderma, Incyte, Pfizer, and Sanofi – investigator.

Poster presented at the 2025 Fall Clinical Dermatology Conference, October 23–26, Wynn Las Vegas, NV.