

WHAT LIES BENEATH: Current and Emerging Treatments for Prurigo Nodularis

Provided by RMEI Medical Education, LLC



This activity is supported by an educational grant from Sanofi and Regeneron Pharmaceuticals.



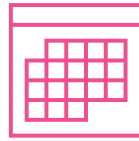




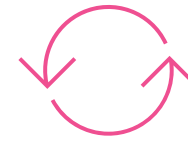
Core Symptoms



Presence of firm,
nodular lesions



Pruritis lasting
 ≥ 6 weeks



History and/or signs of repeated
scratching, picking, or rubbing

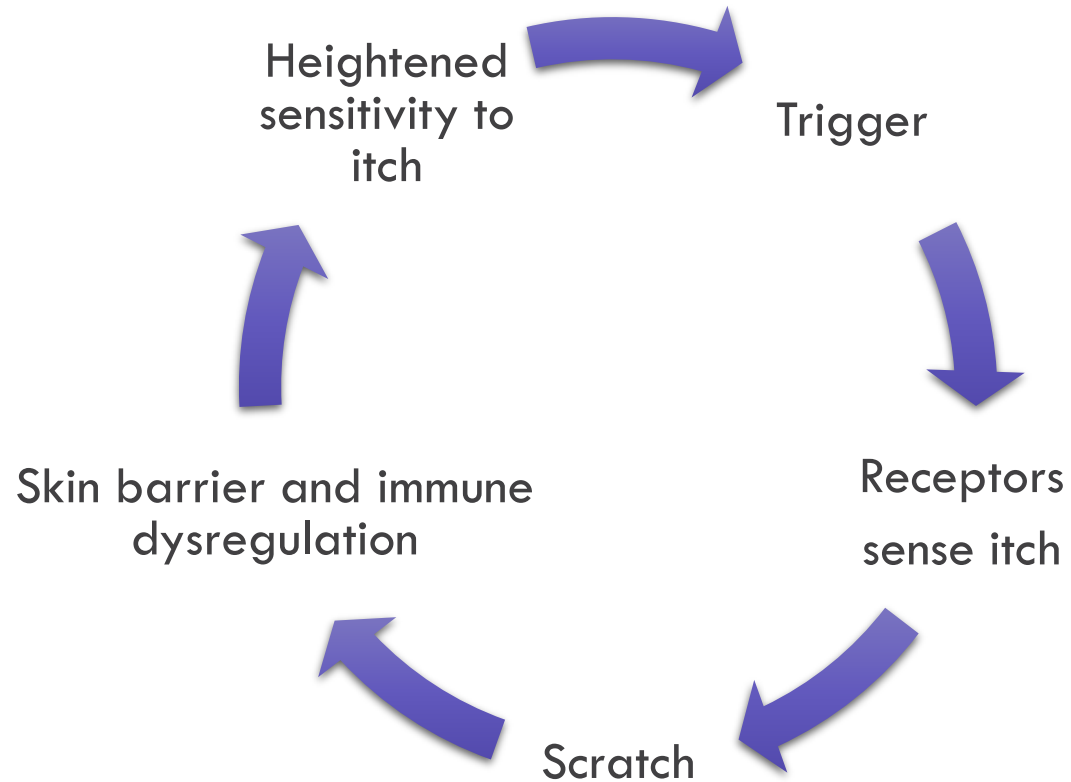
Additional Common Features



- Symmetrical distribution of nodules
- Rarely affected areas: face, palms, soles, scape, and genitals
- Additional lesions induced by scratching may be present
- Burning, stinging, pain
- Impaired QoL, including sleep deprivation
- Associated comorbidities (renal/liver/thyroid dysfunction, diabetes, HIV, HBV/HCV, malignancy)

Pathophysiology

Neuroimmune Dysregulation



Increased Th2 Cytokines and Inflammatory Mediators in Lesional Skin

IL-4

IL-13

IL-31

Others

Induce itch,
inflammation,
and perpetuate the
itch-scratch cycle

Conventional Management



Neuronal

Cannabinoids†

Thalidomide

NK₁ Antagonists

High-dose gabapentinoids

Antidepressants (SNRIs → SSRIs → TCAs)

Low-dose gabapentinoids

Topical ketamine/amitriptyline/lidocaine

Topical capsaicin

Immunological

Mycophenolate Mofetil†

Azathioprine

Cyclosporine

Methotrexate

Narrowband UVB/PUVA Phototherapy

Intralesional Corticosteroids*/cryotherapy

Topical Calcipotriol

Topical Calcineurin Inhibitors

Topical Corticosteroids

*For ≤10 lesions

†Helpful in chronic pruritis, but data is lacking in prurigo nodularis

Adapted from: Elmariah S, et al. *J Am Acad Dermatol*. March 2021;84(3):747-760.

Dupilumab in Prurigo Nodularis



Dually blocks Th2 cytokines IL-4 and IL-13



LIBERTY-PN PRIME Phase 3 Trials



PRIME (N=151)¹

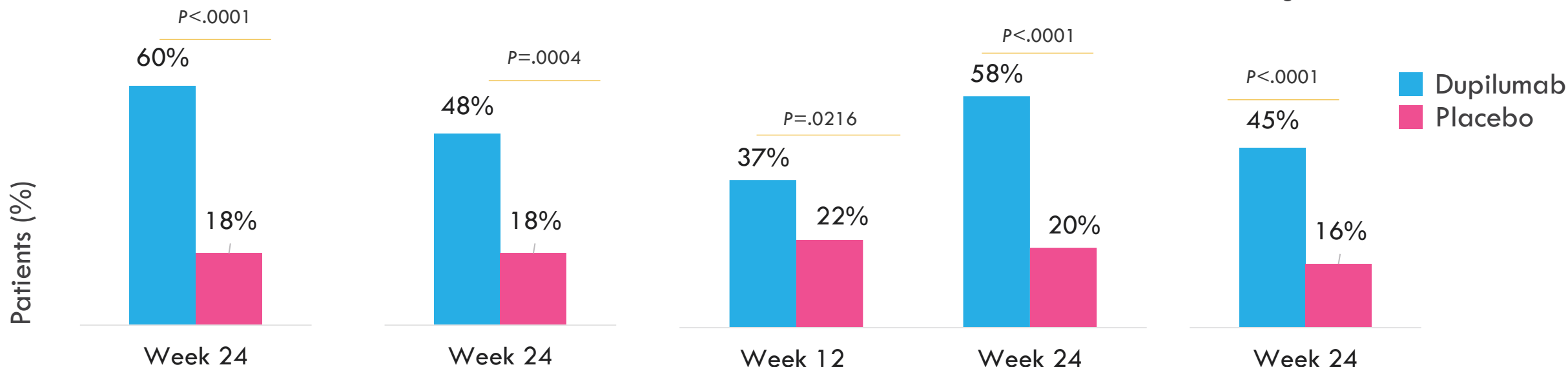
PRIME 2 (N=160)²

Clinically Meaningful Reduction in Itch from Baseline

Percentage of Patients Achieving Clear Skin

Clinically Meaningful Reduction in Itch from Baseline

Percentage of Patients Achieving Clear Skin



In both trials, subjects receiving dupilumab showed improved QoL. No new safety concerns were detected.

1. NCT04183335.

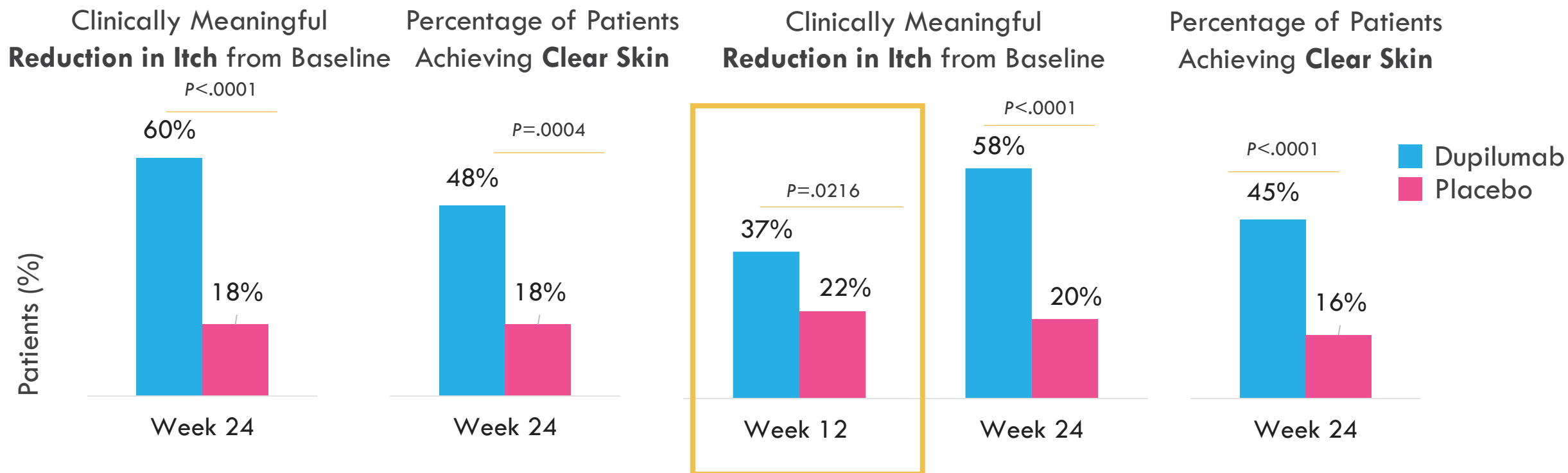
2. Gil Yosipovitch, et al. LIBERTY-PN PRIME2. Presented at AAD Annual Meeting. Late Breaking Abstracts; 26 Mar 2022: Boston, MA.

LIBERTY-PN PRIME Phase 3 Trials



PRIME (N=151)¹

PRIME 2 (N=160)²



In both trials, subjects receiving dupilumab showed improved QoL. No new safety concerns were detected.

1. NCT04183335.

2. Gil Yosipovitch, et al. LIBERTY-PN PRIME2. Presented at AAD Annual Meeting. Late Breaking Abstracts; 26 Mar 2022: Boston, MA.

Emerging Therapies

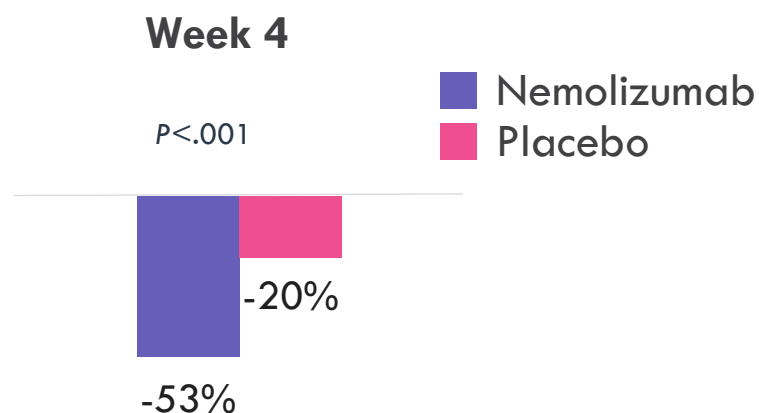


Nemolizumab

Humanized mAb against the **IL-31 receptor A**

OLYMPIA-2 (N=70)¹

Percent change from baseline in the mean peak score for pruritus

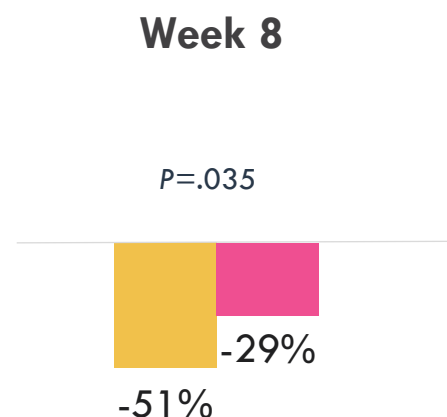


Vixarelimab

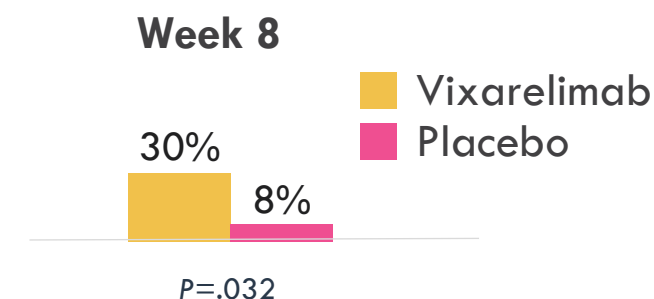
Human mAb against oncostatin M receptor beta (OSMR β). Binding to OSMR β inhibits **IL-31 and OSM signaling**.

Phase 2a (N=49)²

LSM change from baseline in weekly-average WI-NRS



Percent change achieving a PN-IGA score of 0/1



LSM, least squares mean; PN-IGA, Prurigo Nodularis – Investigator’s Assessment

1. Ständer S, et al. *N Engl J Med*. 2020;382(8):706-716. 2. NCT03816891.