

WHAT LIES BENEATH: Current and Emerging Treatments for Prurigo Nodularis

Provided by RMEI Medical Education, LLC



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educational grant from Sanofi and
Regeneron Pharmaceuticals.



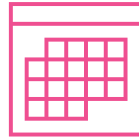




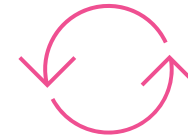
Core Symptoms



Presence of firm,
nodular lesions



Pruritis lasting
 ≥ 6 weeks



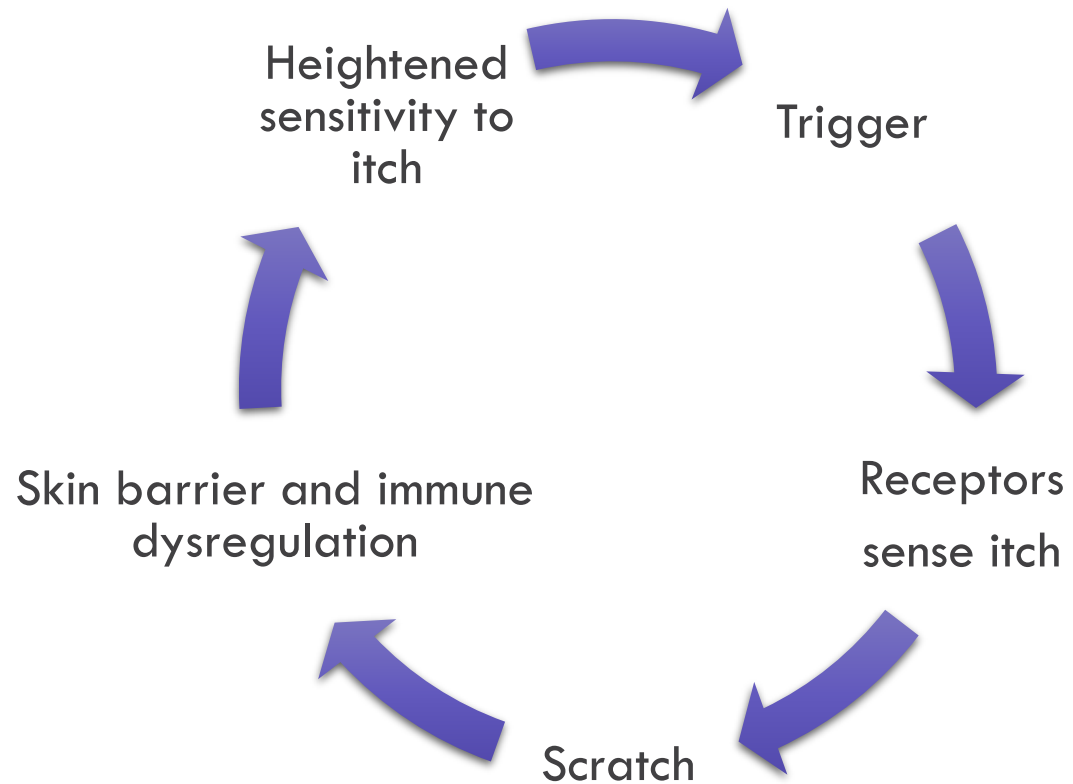
History and/or signs of repeated
scratching, picking, or rubbing

Additional Common Features

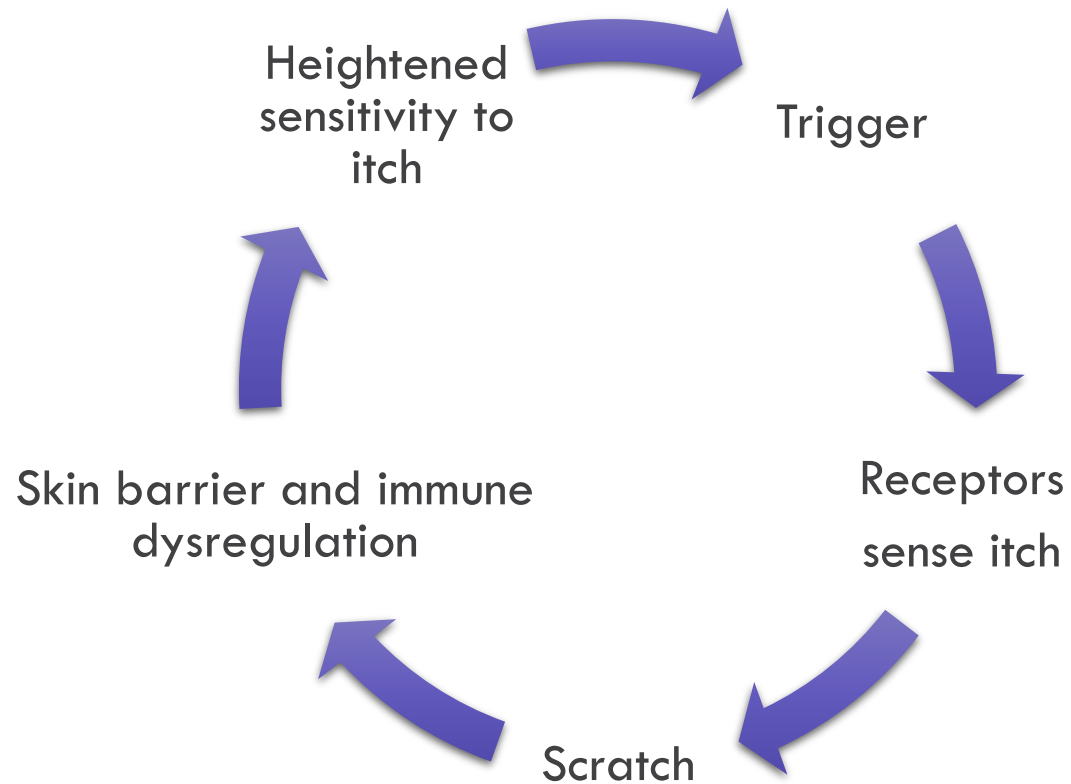


- Symmetrical distribution of nodules
- Rarely affected areas: face, palms, soles, scape, and genitals
- Additional lesions induced by scratching may be present
- Burning, stinging, pain
- Impaired QoL, including sleep deprivation
- Associated comorbidities (renal/liver/thyroid dysfunction, diabetes,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

Neuroimmune Dysregulation



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

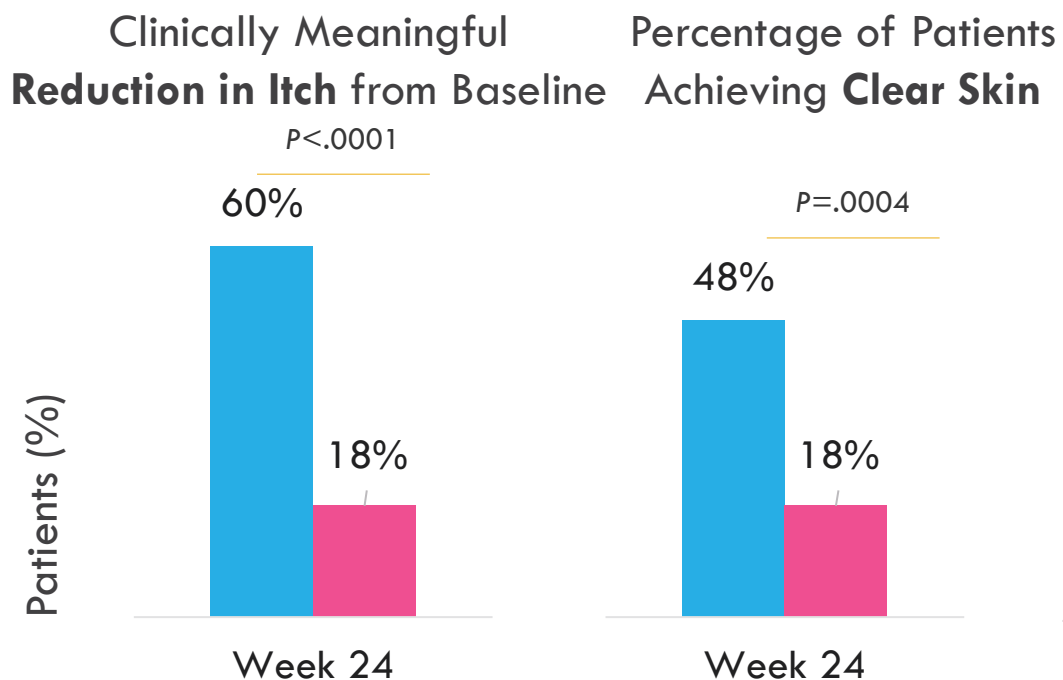
Dually blocks Th2 cytokines IL-4 and IL-13



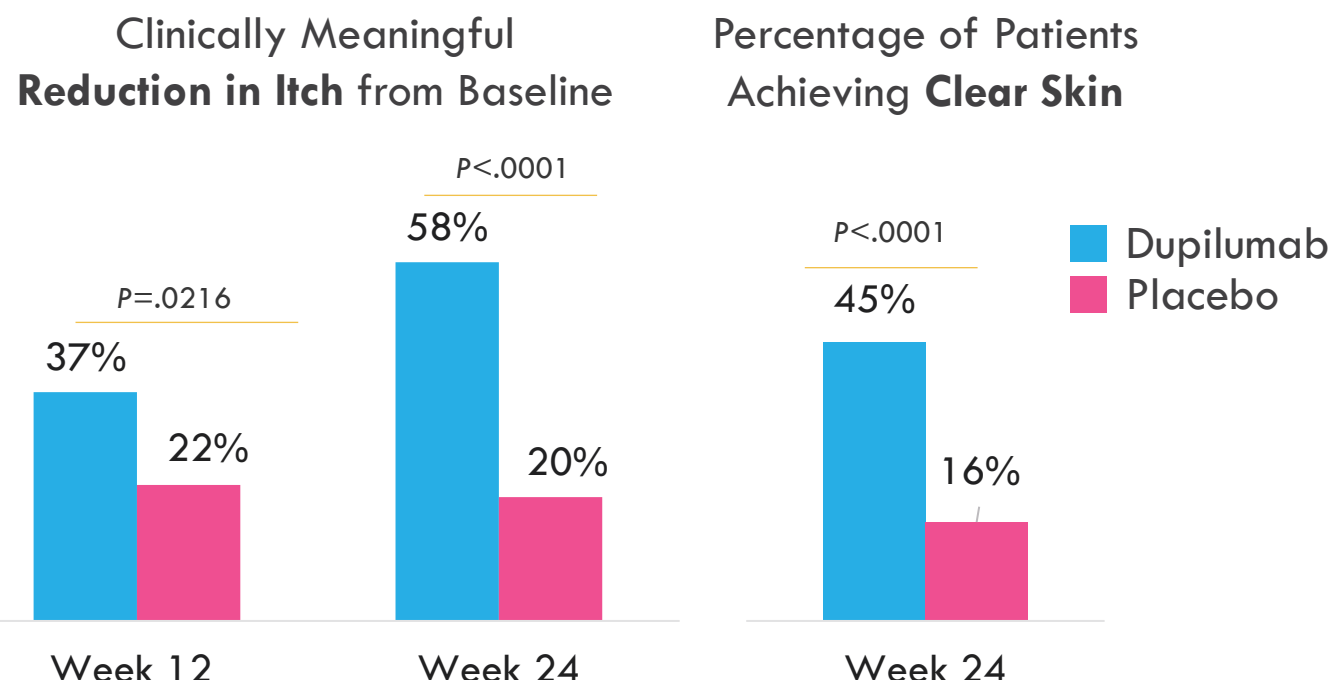
LIBERTY-PN PRIME Phase 3 Trials



PRIME (N=151)¹



PRIME 2 (N=160)²



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

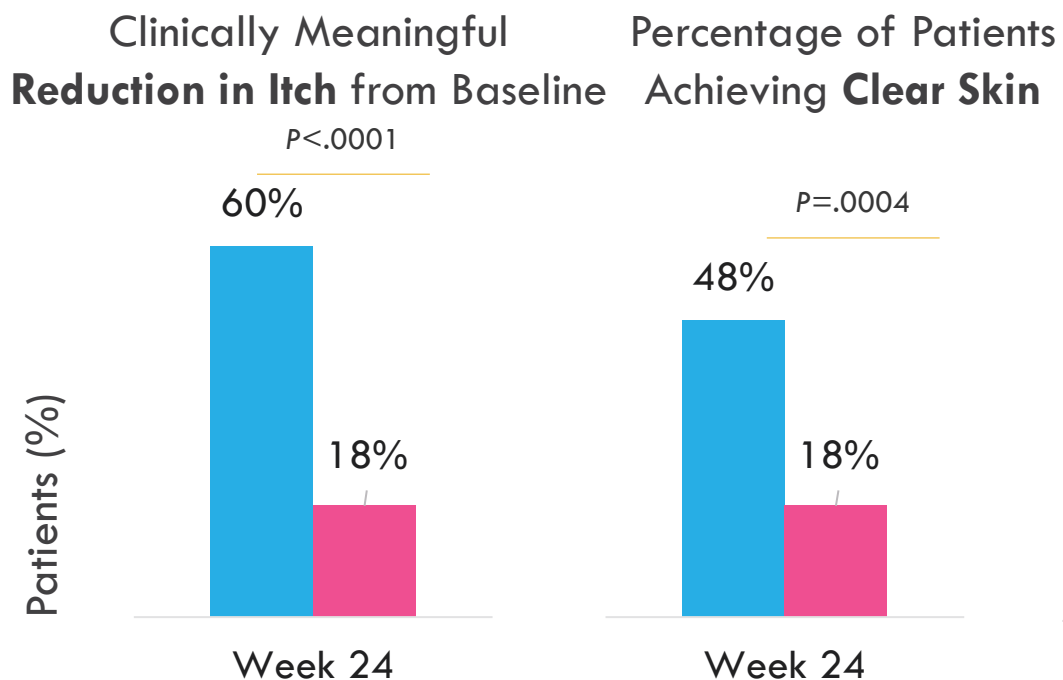
1. NCT04183335.

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

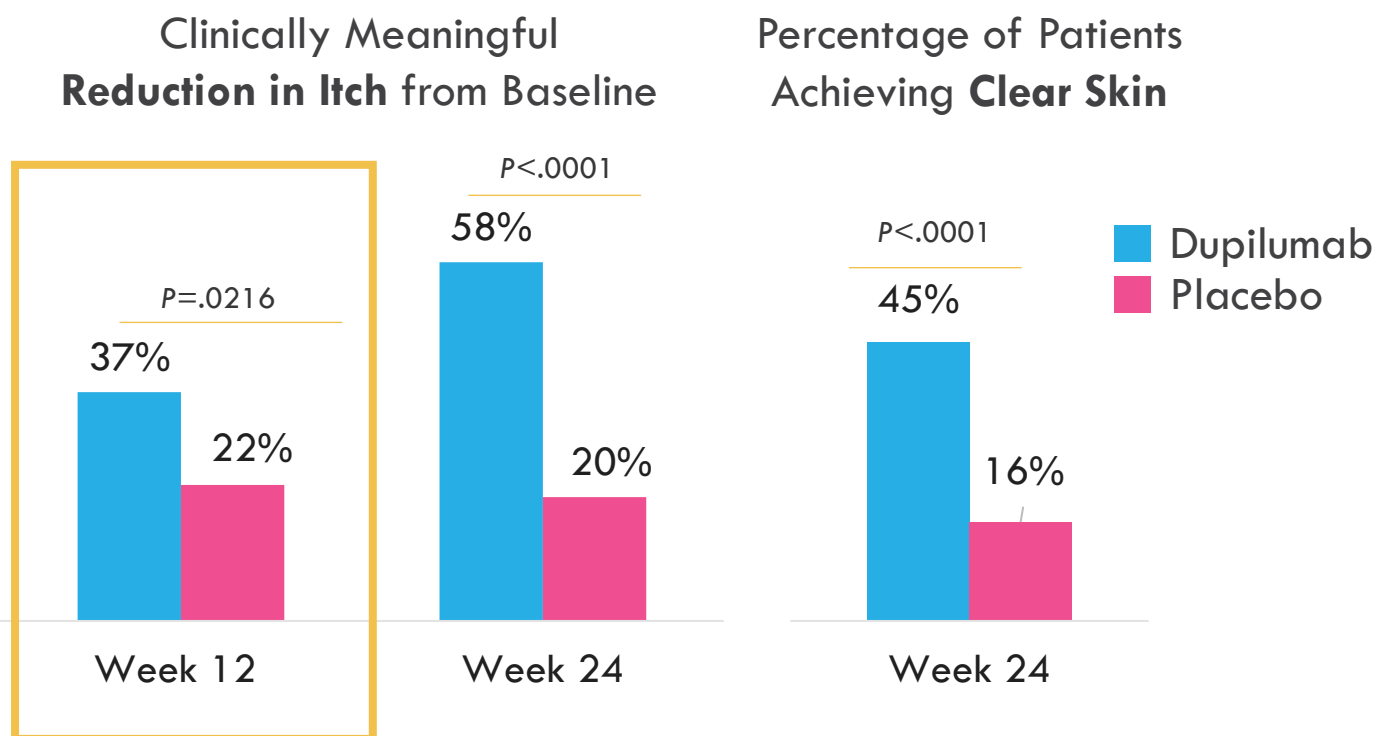
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Emerging Therapies

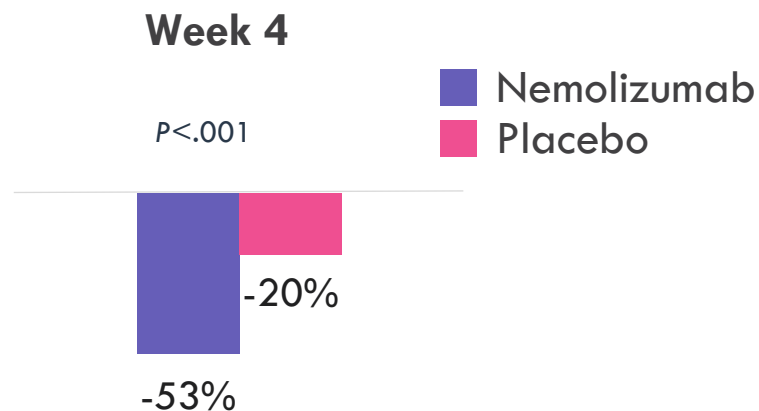


Nemolizumab

Humanized mAb against the
IL-31 receptor A

OLYMPIA-2 (N=70)¹

Percent change from baseline in the
mean peak score for pruritus

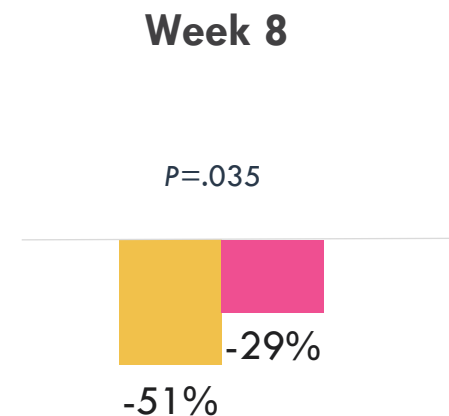


Vixarelimab

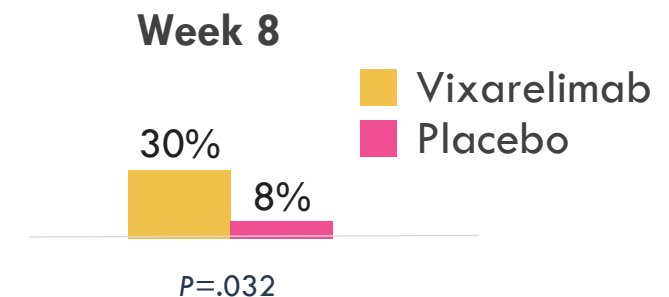
Human mAb against oncostatin M receptor beta (OSMR β).
Binding to OSMR β inhibits **IL-31** and **OSM** signaling.

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.