GALDERMA EST. 1981

Prurigo Nodularis Media Factsheet

About prurigo nodularis

Prurigo nodularis is a debilitating chronic skin condition characterized by thick skin nodules covering large body areas and associated with intense itch (pruritus).1-3

It affects an estimated 72 out of every 100,000 adults aged 18 to 64 in the United States. It is more common in middleaged women and, disproportionately, people of African descent.¹⁻⁴

It is associated with a variety of diseases, including hypertension, chronic kidney disease, type 2 diabetes, HIV infection, and obesity.1



Clinical presentation and burden of disease

Prurigo nodularis is characterized by a number of debilitating signs and symptoms, including:

- Chronic pruritus (itch)⁵
- Disfiguring skin lesions (nodules)⁵
- Sleep disturbance⁵
- Psychiatric co-morbidities⁵

Compared to other dermatological conditions, prurigo nodularis is among the conditions with the largest impact on patients' quality of life.6,7

In studies of adults with prurigo nodularis:

- 49% reported itch as the most burdensome symptom^{8*}
- 21% reported that the visibility of nodules was the most burdensome symptom^{8*}
- 30% reported sleep improvement as a key treatment goal^{9†}
- 15% reported having suicidal thoughts related to their skin disease^{10‡}

The role of IL-31 in prurigo nodularis

IL-31 is at the center of the key drivers of prurigo nodularis.

IL-31 plays a key role in multiple disease mechanisms in prurigo nodularis.^{1,7-9,11} It is a neuroimmune cytokine that bridges the immune and nervous systems and is the key driver of inflammation and fibrosis.^{1,11–14}

- * Results were based on a multicenter, cross-sectional European study of 509 adults with prurigo nodularis (PN). This prospective, questionnaire-based study assessed the clinical profile of PN, as well as its associated burdens
- [†] Results were based on a multicenter, cross-sectional European study of 509 patients with PN. This prospective, questionnaire-based study assessed patient perception of therapeutic goals, as well as previously used therapies, overall satisfaction with therapy, the efficacy of available therapeutic regimens, and out-of-pocket costs.
- * Results were based on a multicenter European study of 3,635 general dermatology outpatients and 1,359 healthy controls. Twenty-seven of these general dermatology patients met study criteria for PN and were assessed for psychological burden of disease.

References:

- Williams KA, et al. Pathophysiology, diagnosis, and pharmacological treatment of prurigo nodularis. Expert Rev Clin Pharmacol. 2021;14(1):67-77. doi:10.1080/17512433.2021.1852 1. 080
- 2. Elmariah S, et al. Practical approaches for diagnosis and management of prurigo nodularis: United States expert panel consensus. J Am Acad Dermatol. 2021;84(3):747-760. doi:10.1016/j.jaad.2020.07.025
- Whang KA, et al. Prevalence of prurigo nodularis in the United States. J Allergy Clin Immunol Pract. 2020;8(9):3240-3241. doi:10.1016/j.jaip.2020.05.051 3.
- Huang AH, et al. Real-world prevalence of prurigo nodularis and burden of associated diseases. J Invest Dermatol. 2020;140(2):480-483.e4. doi:10.1016/j.jid.2019.07.697. 4
- 5. Janmohamed SR, et al. The impact of prurigo nodularis on quality of life: a systematic review and meta-analysis. Arch Dermatol Res. 2021;313(8):669-677. doi:10.1007/s00403-020-02148-0
- Brenaut E, et al. The self-assessed psychological comorbidities of prurigo in European patients: a multicentre study in 13 countries. J Eur Acad Dermatol Venereol. 2019;33(1):157-162. doi:10.1111/jdv.15145 6.
- Balieva FN, et al. The Role of Therapy in Impairing Quality of Life in Dermatological Patients: A Multinational Study. Acta Derm Venerol. 2018; 98(6):563-569. doi: 7. 10.2340/00015555-2918. PMID: 29507999
- Pereira MP, et al. Chronic nodular prurigo: clinical profile and burden. A European cross-sectional study. J Eur Acad Dermatol Venereol. 2020;34(10):2373-2383. doi:10.1111/ 8. jdv.16309
- Pereira MP, et al. Chronic nodular prurigo: a European cross-sectional study of patient perspectives on therapeutic goals and satisfaction. Acta Derm Venereol. 9. 2021;101(2):adv00403. doi:10.2340/00015555-3726
- Brenaut E, et al. The self-assessed psychological comorbidities of prurigo in European patients: a multicentre study in 13 countries. J Eur Acad Dermatol Venereol. 2019; 10. 33(1):157-162. doi: 10.1111/jdv.15145
- 11. Nemmer JM, et al. Interleukin-31 signaling bridges the gap between immune cells, the nervous system and epithelial tissues. Front Med (Lausanne). 2021;8:639097. doi:10.3389/ med.2021.639097
- 12. Wang F, Kim BS. Itch: a paradigm of neuroimmune crosstalk. Immunity. 2020;52(5):753-766. doi:10.1016/j.immuni.2020.04.008
- 13. Zhang Q, et al. Structures and biological functions of IL-31 and IL-31 receptors. Cytokine Growth Factor Rev. 2008;19(5-6):347-356. doi:10.1016/j. cytogfr.2008.08.003
- 14. Tsoi LC, et al. Transcriptomic characterization of prurigo nodularis and the therapeutic response to nemolizumab. J Allergy Clin Immunol. 2021; S0091-6749(21)01557-8. doi:10.1016/j.jaci.2021.10.004