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OLYMPIA Clinical Trial Program Media Factsheet

What are the OLYMPIA trials?[1,2]

OLYMPIA 1 and 2 were two very similarly designed, pivotal phase III clinical trials, designed to evaluate Nemluvio® (nemolizumab) for injection in **adults with prurigo nodularis**.[1,2]

In prurigo nodularis to date, this is the largest phase III clinical trial program completed, and the only program to include an open label, long-term extension study.[1-3]

Nemluvio is the first approved monoclonal antibody specifically inhibiting the signaling of IL-31, a neuroimmune cytokine that drives itch and is involved in inflammation, epidermal dysregulation, and fibrosis (hardening of skin tissue) in prurigo nodularis.[4,5]

The OLYMPIA trials investigated Nemluvio in 560 patients with prurigo nodularis.[1,2] The efficacy and safety of Nemluvio was compared with placebo at Week 16 in a 16- or 24-week treatment period, for OLYMPIA 2 and OLYMPIA 1, respectively.[1,2]

Trial design[1,2,6]

The two randomized, double-blind, placebo-controlled OLYMPIA trials included 560 patients:

- 286 in OLYMPIA 1
- 274 in OLYMPIA 2

Experimental: Nemluvio (nemolizumab)

- Participants weighing less than 90 kg received two subcutaneous (SC) injections of 30 mg Nemluvio (60 mg loading dose) at baseline, then one SC injection of 30 mg Nemluvio once every four weeks up to 16 weeks in OLYMPIA 2 and 24 weeks in OLYMPIA 1.
- Participants weighing 90 kg or more received two SC injections of 60 mg Nemluvio at baseline (no loading dose), and two SC injections of 30 mg Nemluvio (60 mg total) once every four weeks up to 16 weeks in OLYMPIA 2 and 24 weeks in OLYMPIA 1.

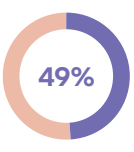
Comparator: Placebo

- Participants weighing less than 90 kg received placebo as two SC injections at baseline, then one SC injection once every four weeks up to 16 weeks in OLYMPIA 2 and 24 weeks in OLYMPIA 1.
- Participants weighing 90 kg or more received placebo as two SC injections at baseline, then two SC injections once every four weeks up to 16 weeks in OLYMPIA 2 and 24 weeks in OLYMPIA 1.

Trial results[6-8]

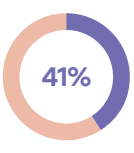
The phase III OLYMPIA 1 and 2 trials **met all primary and key secondary endpoints at Week 16**.[6-8]

Nemluvio as a monotherapy significantly improved itch, skin nodules and sleep disturbance in adult patients with prurigo nodularis, demonstrating **fast onset of action on itch:**[7]



56% and 49% of Nemluvio-treated patients in OLYMPIA 1 and 2 respectively **achieved an at least four-point reduction in itch intensity at Week 16**, as measured by the Peak-Pruritus Numerical Rating Scale (PP-NRS) compared to 16% in both placebo groups. 22% and 20% of Nemluvio-treated patients in OLYMPIA 1 and 2 respectively were itch free or almost-itch free (PP-NRS score <2) at Week 4 compared to 1% and 2% in the placebo group.[7]

26% and 38% of Nemluvio-treated patients in OLYMPIA 1 and 2 respectively **reached clearance (investigator's global assessment [IGA] 0) or almost-clearance (IGA 1) of skin nodules at Week 16**, compared to 7% and 11% in the placebo group.[7]



41% and 55% of Nemluvio-treated patients in OLYMPIA 1 and 2 respectively achieved **76-100% healed pruriginous lesions** compared to 12% and 17% in the placebo group.[6,8]

Additionally, an interim analysis of the OLYMPIA long-term extension study – an ongoing 184-week trial which is **the longest study to be conducted in this patient population to date** – demonstrated Nemluvio's increasing efficacy on itch and skin nodules through to 52 weeks.[3]

Nemluvio was generally well tolerated, and its safety profile was consistent with the phase II trial, and between the OLYMPIA 1 and 2 studies.[3,6-8]

The OLYMPIA trials further demonstrate that **Nemluvio has the potential to be a key therapeutic solution for patients suffering from prurigo nodularis.**

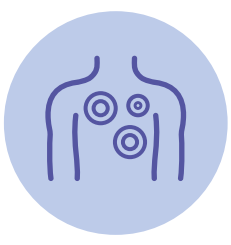
The burden of prurigo nodularis

Prurigo nodularis is a chronic and debilitating neuroimmune skin disease characterized by the presence of intense itch and thick skin nodules (or firm bumps) covering large body areas.[9-11]

It is an underrecognized and underdiagnosed disease and there are limited studies investigating its prevalence.[4,12,13]

Prurigo nodularis severely impacts many aspects of patients' lives.[9-11,14] Signs and symptoms can include:[9-11,14]

Chronic pruritus (itch)



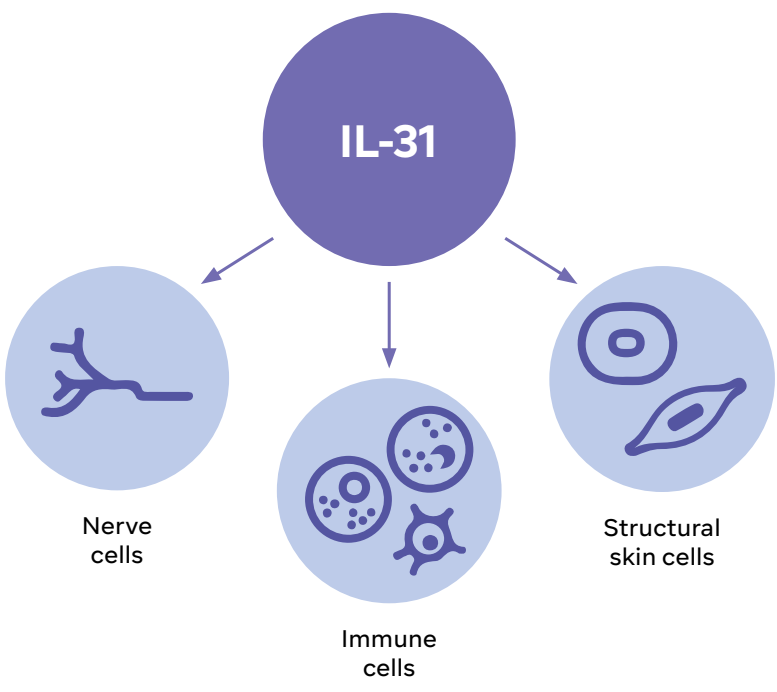
Skin lesions / nodules

Poor sleep quality

Mental health conditions such as anxiety and depression

Symptoms of prurigo nodularis are driven by complex interactions between the skin, nerve and immune cells, and lead to a **vicious cycle of scratching and itching that negatively impacts quality of life**. Disrupting this cycle through rapid and sustained itch relief is crucial to improving long-term outcomes.[11,14-17] In fact, many patients with prurigo nodularis note improvement of itch, sleep and nodules as key treatment goals.[18†]

Behind prurigo nodularis is the overexpression of IL-31, a neuroimmune cytokine, and IL-31 receptor alpha, which bridges neuronal and immune mechanisms to drive signaling across itch, inflammation, epidermal dysregulation and fibrosis.[5,7,19]



Nemluvio's regulatory status

Based on data from the OLYMPIA clinical trial program, **Nemluvio has been approved by the U.S. Food and Drug Administration (FDA) for adults living with prurigo nodularis**.[7] Nemluvio is currently under review by several regulatory authorities for the treatment of prurigo nodularis and moderate-to-severe atopic dermatitis, including the European Medicines Agency, Health Canada, and in Australia, Singapore, Switzerland and the United Kingdom via the Access Consortium.[20,21] Submissions to regulatory authorities in additional countries are ongoing.

Nemluvio was initially granted **Breakthrough Therapy Designation** by the U.S. FDA in December 2019 for the treatment of pruritus associated with prurigo nodularis, a status reconfirmed in March 2023.[22]

Galderma has exclusive rights to the development and marketing of Nemluvio worldwide except in Japan and Taiwan. In Japan, nemolizumab (under the brand name Mitchga®) is approved for the treatment of prurigo nodularis and pruritus associated with atopic dermatitis.[23,24]

Important Safety Information

Indication: NEMLUVIO® (nemolizumab-ilto) is a prescription medicine used to treat adults with prurigo nodularis. **Contraindication:** Known hypersensitivity to NEMLUVIO or any ingredients in NEMLUVIO. **Warnings/Precautions:** Hypersensitivity reactions have been reported with NEMLUVIO use. You should not receive a live vaccine right before or during treatment with NEMLUVIO. **Adverse Events:** Most common side effects of NEMLUVIO include: headache, skin rashes: atopic dermatitis (a type of eczema), eczema, and eczema nummular (scattered circular patches).

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

Please see full Prescribing Information including Patient Information.

†Results were based on a multicenter, cross-sectional European study of 406 patients with prurigo nodularis. 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.

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