A Randomized, Double-Blind, Placebo-Controlled Study to Assess the Efficacy and Safety of Nemolizumab (CD14152) in Subjects with Prurigo Nodularis

Published: 08-06-2020
Last updated: 17-01-2025

The primary objective is to assess the efficacy of nemolizumab (CD14152) compared to placebo in subjects >= 18 years of age with prurigo nodularis (PN) after a 16-week treatment period.

Ethical review	Approved WMO
Status	Completed
Health condition type	Epidermal and dermal conditions
Study type	Interventional

Summary

ID

NL-OMON52726

Source
ToetsingOnline

Brief title
203065-7009814 (Galderma)

Condition

- Epidermal and dermal conditions

Synonym
Itching of the skin

Research involving
Human

Sponsors and support

Primary sponsor: Galderma

Source(s) of monetary or material Support: industry

Intervention

Keyword: nemolizumab, phase 3, prurigo nodularis, study

Outcome measures

Primary outcome

Primary endpoints:

* Proportion of subjects with an improvement of >= 4 from baseline in Peak

Pruritus Numeric Rating Scale (PP NRS) at Week 16

* Proportion of subjects with an Investigator Global Assessment (IGA) success

(defined as an IGA of 0 [Clear] or 1 [Almost clear] and a >= 2-

point improvement from baseline) at Week 16

Secondary outcome

Key secondary endpoints:

* Proportion of subjects with an improvement of >= 4 from baseline in PP NRS at

Week 4

* Proportion of subjects with PP NRS < 2 at Week 16

* Proportion of subjects with an improvement of >= 4 from baseline in SD NRS at

Week 16

* Proportion of subjects with an improvement of >= 4 from baseline in SD NRS at

Week 4

* Proportion of subjects with PP NRS < 2 at Week 4

Study description

Background summary

PN is a skin disease with specific itchy (pruritic) nodules which usually appear on the arms or legs. Patients often present with multiple lesions caused by scratching. This leads to an impaired quality of life and high burden due not only to the severe itch but also the chronic skin lesions and lack of treatment options.
The goal of PN treatment is to break the itch-scratch cycle and allow the skin to heal. Treatment of chronic pruritus is difficult, as the response to current therapy options is typically limited. There is no standardized or approved therapy for PN to date and evidence from controlled studies is limited.

Study objective

The primary objective is to assess the efficacy of nemolizumab (CD14152) compared to placebo in subjects >= 18 years of age with prurigo nodularis (PN) after a 16-week treatment period.

Study design

This phase 3, multicenter, double-blind, placebo-controlled, randomized, parallel-group study is designed to evaluate the efficacy and safety of nemolizumab in subjects with PN. Approximately 270 subjects with PN will be randomized 2:1 to receive either nemolizumab (CD14152) or placebo, stratified by study center. Subjects weighing < 90 kg at baseline will receive either 30 mg nemolizumab (with 60
mg loading dose at baseline) or placebo every 4 weeks (Q4W). Subjects weighing >= 90 kg at baseline will receive either 60 mg nemolizumab or
placebo Q4W (no loading dose). Subjects* participation in the study will be up to 28 weeks. The study consists of a screening period (up to 4 weeks), a 16-week treatment period, and an 8-week follow up period (12 weeks after their last study drug injection).

Intervention

Nemolizumab (CD14152) or placebo will be provided as lyophilized powder for solution for subcutaneous injection only after reconstitution in a single-use, pre-filled, dual-chamber syringe (DCS).
During the treatment period, eligible subjects will be randomized to receive either nemolizumab (CD14152) or placebo, administered Q4W for 16 weeks (last injection at Week 12). Subjects weighing < 90 kg at baseline will receive either nemolizumab 30 mg or placebo via a single SC injection (with a loading dose of 60 mg on Day 1/baseline); subjects weighing >= 90 kg at baseline will receive either nemolizumab 60 mg or placebo via two SC injections at all visits (no loading dose).

Study burden and risks

Please refer to table 5 in the protocol (overview of procedures).

The participation in the study will last about 28 weeks. During this time, the patient will visit the hospital 7 times. The screening visit and the treatment visit will take about4-5 hours.

These procedures include:
- Physical exam, vital signs, demographic, race and medical history
- ECG
- Performing peak expiratory flow measurements
- Measure PN
- Questionnaires
- Blood and urine tests (including HIV, tuberculosis and Hepatitis B)
- request for fasting
- Pregnancy tests in women of childbearing potential
- Female patients: no breastfeeding allowed. Effectiv e methods of birth control must be used from the time of signing the ICF, throughout the entire study and for 3 months following the last dose of the study drug.

Possible side effects which are already known are described in the patient information sheet /consent form and in the Investigator Brochure.

Contacts

Public
Galderma

Avenue Gratta-Paille 2 Avenue Gratta-Paille 2
Switzerland 1018
CH
Scientific
Galderma

Avenue Gratta-Paille 2 Avenue Gratta-Paille 2
Switzerland 1018
CH

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)

Inclusion criteria

1. Male or female and aged >=18 years at the time of screening;
2. Clinical diagnosis of PN for at least 6 months with:
a. Pruriginous nodular lesions on upper limbs, trunk, and/or lower limbs;
b. At least 20 nodules on the entire body with a bilateral distribution
c. IGA score >= 3 (based on the IGA scale ranging from 0 to 4, in which 3 is moderate and 4 is severe) at both the screening and baseline visits;
3. Severe pruritus defined as follows on the PP NRS:
• At the screening visit (Visit 1): PP NRS score is >= 7.0 for the 24-hour period immediately preceding the screening visit;
• At the baseline visit (Visit 2): Mean of the daily intensity of the PP NRS score is >= 7.0 over the previous week;
4. Female subjects of childbearing potential (ie, fertile, following menarche and until becoming post-menopausal unless permanently sterile) must agree to use at least 1 adequate and approved method of contraception throughout the study and for 12 weeks after the last study drug injection. Adequate and approved methods of contraception applicable for the subject and/or her partner are defined below:
• True abstinence, when in line with the preferred and usual lifestyle of the subject. Periodic abstinence (eg, calendar, ovulation, symptothermal, post-ovulation methods) and withdrawal are not acceptable methods of contraception;
• Progestogen-only oral hormonal contraception;
• Combination of male condom with cap, diaphragm, or sponge with spermicide (double barrier methods);
• Combined (estrogen- and progestogen-containing) oral, intravaginal, or transdermal hormonal contraception;
• Injectable or implanted hormonal contraception;
• Intrauterine devices or intrauterine hormone releasing system;
• Bilateral tubal ligation or tube insert (such as the Essure system) at least 3 months before the study;
• Vasectomy of male partner at least 3 months before the study
5. Female subjects of non-childbearing potential must meet 1 of the following criteria:

• Absence of menstrual bleeding for 1 year prior to screening without any other medical reason;
• Documented hysterectomy , bilateral salpingectomy, or bilateral oophorectomy at least 3 months before the study;
6. Subject is willing and able to comply with all of the time commitments and procedural requirements of the clinical study protocol, including daily diary recordings by the subject using an electronic handheld device provided for this study.
7. Read, understood and signed an informed consent form (ICF) before any investigational procedure(s) are performed.

Exclusion criteria

1. Body weight < 30 kg;
2. Chronic pruritus resulting from another active condition other than PN, such as but not limited to scabies, lichen simplex chronicus, psoriasis, atopic dermatitis, contact dermatitis, acne, folliculitis, lichen planus, habitual picking/excoriation disorder, sporotrichosis, bullous autoimmune disease, end-stage renal disease, cholestatic liver disease (eg, primary biliary cirrhosis) , or diabetes mellitus or thyroid disease that is not adequately treated, as per standard of care;
3. Unilateral lesions of prurigo (eg, only one arm affected);
4. History of or current confounding skin condition (eg, Netherton syndrome, cutaneous T-cell lymphoma [mycosis fungoides or Sezary syndrome], chronic actinic dermatitis, dermatitis herpetiformis)
5. Subjects meeting 1 or more of the following criteria at screening or baseline:
- Had an exacerbation of asthma requiring hospitalization in the preceding 12 months;
- Reporting asthma that has not been well-controlled (ie, symptoms occurring on <; 2 days per week, nighttime awakenings 2 or more times per week, or some interference with normal activities) during the preceding 3 months;
- Asthma Control Test <= 19 (only for subjects with a history of asthma)
- Peak expiratory flow < 80% of the predicted value.
6. Subjects with a current medical history of chronic obstructive pulmonary disease and/or chronic bronchitis;
7. Cutaneous infection within 1 week before the baseline visit, any infection requiring treatment with oral or parenteral antibiotics, antivirals, antiparasitics, or antifungals within 2 weeks weeks before the baseline visit, or any confirmed or suspected coronavirus disease (COVID)-19 infection within 2 weeks before the screening or baseline visit. Subjects may be rescreened once the infection has resolved. . Resolution of COVID-19 infection can be confirmed by recovery assessment methods, as described in Section 8.4.2.;
8. Positive serology results (hepatitis B surface antigen [HBsAg] or hepatitis B core antibody [HBcAb], hepatitis C antibody, or human immunodeficiency virus

antibody) at the screening visit;
9. Requiring rescue therapy for PN during the screening period or expected to require rescue therapy within 4 weeks following the baseline visit;
10. Subjects with active atopic dermatitis (signs and symptoms other than dry skin) in the last 3 months;
11. Neuropathic and psychogenic pruritus such as but not limited to notalgia paresthetica, brachioradial pruritus, small fiber neuropathy, skin picking syndrome, or delusional parasitosis;
12. Having received any of the treatments in the table reported in the protocol within the specified timeframe before the baseline visit;
13. Previous participation in a clinical study with nemolizumab;
14. Pregnant women (positive serum pregnancy test result at the screening visit or positive urine pregnancy test at the baseline visit), breastfeeding women, or women planning a pregnancy during the clinical study;
15. History of lymphoproliferative disease or history of malignancy of any organ system within the last 5 years, except for:
- Basal cell carcinoma, squamous cell carcinoma in situ (Bowen*s disease), or carcinomas in situ of the cervix that have been treated and have no evidence of recurrence in the last 12 weeks before the screening visit, or;
- Actinic keratoses that have been treated
16. History of hypersensitivity (including anaphylaxis) to an immunoglobulin product (plasma-derived or recombinant, eg, monoclonal antibody) or to any of the study drug excipients;
17. Known active or latent tuberculosis infection;
18. Known or suspected immunosuppression or unusually frequent, recurrent, severe, or prolonged infections as per investigator judgment;
19. Any medical or psychological condition or any clinically relevant laboratory abnormalities, such as but not limited to elevated alanine aminotransferase (ALT) or aspartate aminotransferase (AST) (of normal [ULN]) in combination with elevated bilirubin (<; 2 × ULN), during
the screening period that may put the subject at significant risk according to the investigator*s judgment, if he/she participates in the clinical study, or may interfere with study assessments (eg, poor venous access or needle-phobia);
20. History of alcohol or substance abuse within 6 months of the screening visit;
21. Planned or expected major surgical procedure during the clinical study;
22. Subject is unwilling to refrain from using prohibited medications during the clinical study;
23. Currently participating or participated in any other study of a drug or device, within the past 8 weeks before the screening visit, or is in an exclusion period (if verifiable) from a previous study.
For subjects accepting optional biopsy sampling (by signing an additional consent), the following exclusion criteria also apply. If any of the below criteria are met, biopsy samples must not be collected:
24. History of coagulation disorders
25. Known sensitivity to local anesthetics
26. Using platelet aggregation inhibitors, or anticoagulants (sporadic intake

or continuous low-dose intake of aspirin or other non-steroidal anti-inflammatory drugs is allowed)
27. History or physical evidence of keloids or hypertrophic scarring resulting from skin trauma. The clinical examination will include the observation of scars.

Study design

Design

Study phase:	3
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Completed
Start date (anticipated):	14-07-2021
Enrollment:	10
Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	CD14152
Generic name:	Nemolizumab

Ethics review

Approved WMO

Date:	08-06-2020
Application type:	First submission

Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	26-07-2020
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	07-09-2020
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	08-09-2020
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	02-06-2021
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	09-07-2021
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	01-04-2022
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	02-06-2022
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
EudraCT	EUCTR2019-004789-17-NL
ClinicalTrials.gov	NCT04501679
CCMO	NL73569.056.20

Study results

Date completed: 08-03-2022

Results posted: 13-11-2023

First publication
18-09-2023