

## **Study Identification**

**Protocol ID:** HS. PROB

### **Brief Title**

“Clinical trial to evaluate the efficacy of an oral probiotic in hidradenitis suppurativa treatment”

### **Official Title**

“Randomized, double-blind, placebo-controlled clinical trial to evaluate the efficacy of an oral probiotic preparation in hidradenitis suppurativa treatment”

## **Study Status**

**Study Start:** 13/06/2023.

**Study Completion:** 13/06/2024

## **Sponsor/Collaborators**

**Sponsor:** Galenicum Derma S.L

**Collaborators:** Grupo MiBioPath UCAM

## **Ethics Committee**

**Board Affiliation:** University Hospital Fundación Jiménez Díaz

**Approval number:** 11/04/2023

## **Study Description**

### **Brief Summary**

The clinical trial has a randomized, double-blind, placebo-controlled design, which aims to evaluate the effect of an oral probiotic preparation administered for 12 weeks on the evolution of hidradenitis suppurativa.

**Keywords:** hidradenitis suppurativa, acne inversa, probiotics, microbiota, microbiome

### **Description**

Randomized, double-blind, placebo-controlled clinical trial, to evaluate an oral probiotic effectiveness administered for 12 weeks on the hidradenitis suppurativa evolution.

A total of 60 patients diagnosed with hidradenitis suppurativa will participate in the study, who will be randomized into two treatment groups in a 1:1 ratio (30 patients per group).

The intervention groups are differentiated according to the treatment to be received: probiotic or placebo of similar appearance, along with standard therapy according to usual clinical practice.

The 12 weeks of treatment are structured into three face-to-face visits: Visit 1 (initial; week 0), Visit 2 (intermediate; week 6) and Visit 3 (final; week 12).

## **Study Design**

**Study type:** Interventional

**Interventional Study Model:** Randomized, double-blind, placebo-controlled with parallel assignment

**Number of arms:** 2

**Masking:** Double (Participant and Investigator)

**Allocation:** Randomized

**Enrollment:** 60 patients

## **Arms and Interventions**

### **Experimental arm**

Probiotic group: Probiotic mixture of Lactobacillus and Bifidobacteria strains in oral capsule format. Freeze-dried probiotic at a minimum concentration of  $1 \times 10^9$  colony forming units (cfu), based on microcrystalline cellulose, in a hydroxy-propyl-methyl cellulose capsule. Oral capsule consumption once a day for 12 weeks

### **Placebo comparator**

Placebo group: Based on microcrystalline cellulose, in a hydroxy-propyl-methyl cellulose capsule. Oral capsule consumption once a day for 12 weeks

## **Outcome measures**

### **Primary Outcome Measure**

- Changes from baseline in Hidradenitis Suppurativa Score (HSS) at 6 and 12 weeks

### **Secondary Outcome Measures**

- Changes from baseline in Hidradenitis Suppurativa Physician's Global Assessment (HS-PGA) category at 6 and 12 weeks
- Hidradenitis Suppurativa Clinical Response (HiSCR) treatment response rate at 6 and 12 weeks
- Treatment response rate according to Canoui-Poitrine phenotypes at 6 and 12 weeks
- Changes from baseline in *Dermatology Life Quality Index* (DLQI) at 6 and 12 weeks

- Changes from baseline in Visual Analogue Scale (VAS) of the most painful injury at 6 and 12 weeks
- Changes from baseline in number, location and type of injuries accumulated between visits at 6 and 12 weeks
- Number and days of rescue treatments, as well as concomitant treatments at 6 and 12 weeks
- Changes from baseline in blood count and biochemistry values related to metabolic syndrome, insulin resistance, and inflammatory biomarkers at 12 weeks
- Changes in gut microbiota: alpha diversity, beta diversity and composition, by sequencing of the R16s gene, of a stool sample at baseline and 12 weeks
- Study treatment compliance rate at 6 and 12 weeks
- Number of adverse events at 6 and 12 weeks

## **Eligibility**

### **Inclusion Criteria**

- Patients of both sexes of an age equal to or greater than 18 years.
- Clinical diagnosis of Hidradenitis Suppurativa with at least one active lesion per month, defined as a painful nodule, sinus, abscess or fistula drainage, during the three months prior to the study.
- Patients with a new diagnosis or with stable treatment during the 8 weeks prior to inclusion in the study
- Patients who agree to comply with the established procedures and to give their written consent after receiving the information

### **Exclusion Criteria**

- Pregnancy and lactation or who do not commit to use an effective contraceptive method during the course of the study
- Allergy and/or intolerance to any of the components of the product under study.
- Use of probiotics or antibiotics in the last 8 weeks
- Changes in the treatments commonly used for HS in the last 8 weeks
- Any pathological situation such as inflammatory bowel disease, pseudomembranous colitis, diverticulitis, cytomegalovirus colitis and, in general, any intestinal pathology that, in the researchers' opinion, implies intestinal bacterial dysbiosis.
- Medical or surgical history that, at the investigator's discretion, does not allow participation in the study.
- Patients with fever (axillary temperature or equivalent higher than 37.5 °C).
- Patients with severe allergic diseases

- Refusal to participate in the study and to sign the consent.
- Who are participating or have completed their participation in another clinical trial with a drug or medical device in the last 30 days before the start of the study treatment.

### **Withdrawal Criteria**

- Loss of tracking
- Withdrawal of consent
- Lack of collaboration
- Substantial changes during the study in the treatments habitually used by the patient before the start of the study, especially the cycles of systemic antibiotics lasting more than 7 days
- Any pathological situation that develops during the study and at the investigator's discretion does not allow it to continue in the same
- Suffering an Adverse Event that prevents them from performing the study procedures or complying with the study treatments.
- Use of other probiotics during the study
- Treatment adherence less than 80%

### **Contacts**

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