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Clinical investigation to evaluate the performance and safety profile of a new dressing in the treatment of chronic, non-ischemic, non-healing diabetic foot ulcers, in association with the standard of care

Submission date
24/03/2022

Recruitment status
No longer recruiting

Registration date
04/05/2022

Overall study status
Completed

Last Edited
30/07/2024

Condition category
Skin and Connective Tissue Diseases

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[_] Record updated in last year

Plain English summary of protocol

Background and study aims
IBSA Institut Biochimique S.A. (Lugano, Switzerland), the Sponsor of this study, have begun a clinical study on the medical device GBT013, a dressing for the treatment of chronic non-ischemic, non-healing diabetic foot ulcers. GBT013 already obtained CE certification in Europe (with the tradename Genmatrix®) and is approved for the treatment of chronic wounds, but it is not yet on the market. The aim of this study is to confirm the safety of the treatment with GBT013 for the intended usage, i.e. treatment of chronic wounds, in agreement with its currently approved Instructions For Use leaflet. The Sponsor is willing to conduct such a study in order to expand the clinical experience with the device.

Who can participate?
Patients aged 18 and over with diabetes and a chronic non-ischemic, non-healing foot ulcer

What does the study involve?
Participation in the study will last up to a maximum of 120 days (around 17 weeks) and participants will be asked to come to the clinical site for a maximum of 10 visits. The study consists of a screening period, which will start with the signature of the informed consent form. The screening period may last up to a maximum of 21 days (3 weeks) and includes questions and tests to determine whether subjects are eligible for the study. At the end of the screening period, if eligible for the study, participants will return to the clinical site to start the treatment with GBT013. The treatment period will last for a maximum of 70 days (12 weeks) and will be followed by 14 days (2 weeks) of follow up. From the screening period until the follow-up, a specialised nurse will visit subjects at home at least twice weekly to perform a medication change and check subjects' compliance to the study requirements. It will take about 3 months to

recruit all the subjects needed in this study and 4 months to evaluate all of them. This is a multicentre study, which means that the research will be carried out in various medical centres only in Poland and a total of 40 subjects will take part.

What are the possible benefits and risks of participating?
It cannot be confirmed that the study will help the participants but the information collected will help improve the treatment of people suffering from diabetic foot ulcers. The expected benefits consist of enhanced healing of the target ulcer treated with GBT013 and faster resolution of symptoms caused by the ulcer. Participants will receive evaluation and treatment for diabetic foot ulcers and will be supplied with an appropriate special boot to support the ulcer healing. Ulcer cleansing, complete debridement, secondary dressing therapy and GBT013 application will be provided on regular basis according to the study visit scheme included in the clinical investigational plan. One of the potential major advantages of GBT013 is the reduced number of applications needed for achieving complete ulcer healing. Based on the data available to date, a new application of GBT013 is necessary on average every 7 days for about 3 weeks. Furthermore, unlike other dressings, GBT013 may be left in place and layered if further applications are needed. This significantly minimizes interference with the wound, accelerating the healing process.

Where is the study run from?
IBSA Institut Biochimique (Switzerland)

When is the study starting and how long is it expected to run for?
February 2021 to May 2023

Who is funding the study?
IBSA Institut Biochimique SA (Switzerland)

Who is the main contact?
Serena Caverzasio, Serena.caverzasio@ibsa.ch

Contact information

Type(s)
Public

Contact name
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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
20PL-GBT01311

Study information

Scientific Title
An open-label, multicentre, clinical investigation of the safety and performance of a new collagen-based, chondroitin sulfate- and chitosan-containing active wound care dressing, associated to standard of care, in the treatment of chronic, non-ischemic, non-healing diabetic foot ulcer

Acronym
GBT013

Study objectives
Laboratoires Genévrier (Antibes, France), currently IBSA Pharma SAS (France), a Sponsor's subsidiary, developed a class III medical device, containing collagen, chitosan and chondroitin sulfate, i.e. GBT013 (product's trademark in France: Genmatrix®), which received a CE certificate for the first time in November 2006, and subsequently reissued in May 2017, further revised in July 2019 and renewed in November 2020. The device has been initially CE-marked by equivalence to predicate devices of GBT013 (GBT013 CER rev2 2020) according to the MEDDEV 2.7.1 Rev 4, under the tradename of Proderm®.

The aim of this clinical investigation is to confirm the safety of the treatment with GBT013 GBT013 for the intended usage, i.e. treatment of chronic wounds, in agreement with its currently approved Instructions For Use (IFU).

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 07/04/2021, Ethics Committee of Regional Medical Chamber in Łódź (3 Czerwona Str., 93-005 Łódź, Poland; +48 (0)42 683 17 44; Bioetyka@oil.lodz.pl), ref: K.B.–8/2021

Study design
Multi-centre open-label prospective clinical investigation

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied

Chronic, non-ischemic, non-healing diabetic foot ulcer (DFU)

Interventions
The Implantable Medical Device (IMD) is a CE-certified product classified as a Class III medical device according to Directive 93/42/EEC and MDR 2017/745. The IMD is available as a sterile, single use, biocompatible and biodegradable dermal equivalent dressing (5 cm x 5 cm), manufactured by Laboratoires Genévrier (Antibes, France). GBT013 is a sterile, three-dimensional porous dressing, composed of collagen (72%), chitosan (20%) and chondroitin sulfate (8%). Type I collagen 1% gel is of equine, chondroitin sulfates of porcine and chitosan of squid origin. It is intended for topical use.

This study is a post-market investigation the Sponsor is willing to conduct in order to expand the clinical experience with the IMD and confirm its safety and performance when used according to its CE certification. Overall, subject participation in the study will last up to a maximum of 120 days (around 17 weeks) and subjects will be asked to come to the clinical site for a maximum of 10 visits. The study consists of a screening period, which will start with the signature of the informed consent form. The screening period may last up to a maximum of 21 days (3 weeks) and includes questions and tests to determine whether subjects are eligible for the study. At the end of the screening period, if eligible for the study, subjects will return to the clinical site to start the treatment with GBT013.

The treatment period will last for a maximum of 70 days (12 weeks) and will be followed by 14 days (2 weeks) of follow up. From the screening period until the follow-up, a specialised nurse will visit subjects at home at least twice weekly to perform a medication change and check subjects' compliance with the study requirements.

Intervention Type
Device

Phase
Not Applicable

Drug/device/biological/vaccine name(s)
GBT013

Primary outcome(s)
Safety of the IMD assessed using the incidence of adverse events (AEs) and, specifically, treatment-emergent AEs (TEAEs) occurring at any time during the study (Common Terminology Criteria for Adverse Events v.5.0) (incidence, severity, duration, and causal relationship with the investigational product (IP) assessment)

Key secondary outcome(s))
Safety of the IMD assessed using:
1. Treatment-related TEAEs (i.e., adverse device effects [ADEs]) and serious TEAEs occurring at any time during the study
2. Infection incidence at the target ulcer and duration (days) of systemic antibiotherapy
3. Incidence of limb amputation (minor and major) needed at any time during the study
4. Overall treatment tolerability, independently judged by the Investigator and subject using a 5-point scale (4 = excellent; 3 = good; 2 = fair; 1 = poor; 0 = none) at the end of the study
5. Vital signs (systolic blood pressure, diastolic blood pressure, heart rate) measured at each visit (from screening to visit 9 and follow up visit)

6. Serum creatinine, ALT, complete blood count, and proteinuria measured at screening and Visit 9
7. Subject's exposure (mean number of IP dressings used) during the whole study period

Performance of the IMD assessed using:
1. Proportion (%) of target ulcers closed ≤12 weeks (ITT) (defined as 100% re-epithelialization and no drainage) and confirmed at the follow-up visit 2 weeks later, as assessed by the investigators at the investigational site
2. Percent (%) reduction of the wound area measured with a standardised digital picture and validated image analysis software at each control visit
3. Time (days) elapsed from the first IP application until complete ulcer closure, defined as 100% re-epithelialization and no drainage
4. Overall treatment performance (easiness of IP manipulation, IP efficacy), judged by the Investigator using a 5-point scale (4 = excellent; 3 = good; 2 = fair; 1 = poor; 0 = none) at the end of the study

Subject's assessment of their quality of life and their satisfaction with the treatment assessed using:
1. Subject's quality of life (QoL) assessed by the subject using the SF-36 questionnaire at the screening visit and visit 9
2. Treatment satisfaction judged by the subject using a 5-point scale (4 = excellent; 3 = good; 2 = fair; 1 = poor; 0 = none) at the end of the study

Completion date
15/05/2023

Eligibility

Key inclusion criteria
1. Adult male and female outpatients aged ≥18 years
2. Subject being diagnosed with type 1 or type 2 diabetes
3. Subject diagnosed with plantar neuropathic DFU (positive Semmes-Weinstein 10 g Monofilament test)
4. Chronic DFU present from ≥4 weeks and ≤ 24 weeks
5. DFU cross-sectional area of ≥1 cm^2 and ≤10 cm^2
6. DFU of grade 1A-1B or 2A-2B according to the University of Texas Staging System for Diabetic Foot Ulcers
7. DFU Grade 1/uninfected or Grade 2/mild infected according to Infectious Diseases Society of America (IDSA) classification
8. Glycated haemoglobin HbA1c value ≤9% at Screening or within 3 months prior to inclusion
9. Presence of dorsalis and posterior tibial pulses and Ankle-Brachial Pressure Index (ABPI) value ≥0.9 and ≤1.2 at Screening or within 3 months prior to inclusion
10. No surgery at the limb of interest within 1 month prior to inclusion
11. Performance status Eastern Cooperative Oncology Group (ECOG) 0-1
12. Subject provided written informed consent to participate in the study obtained according to Good Clinical Practice (GCP)
13. Subject able to comprehend the full nature and the purpose of the study, including possible risks and side effects, and subjects able to cooperate with the Investigator and to comply with the requirements of the entire study (including the ability to attend all the planned study visits according to the time limits, have access to the internet via a computer, iPad, iPhone or Android device), based on Investigator's judgement

14. Females of childbearing potential (i.e., not permanently sterilised - post-hysterectomy or tubal ligation status – or not postmenopausal) must have a negative pregnancy test result at Screening and must use an appropriate method of contraception for at least 30 days before inclusion in the study and during the whole study period, according to the definition in ICH M3 Guideline: a highly effective method is defined as those which results in a low failure rate (i.e., less than 1% per year) when used consistently and correctly.

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
All

Key exclusion criteria
1. DFU of ischemic or neuroischemic origin (ABPI <0.9)
2. DFU which cross-sectional area diminished >30% during the 2-week run-in period of the study, i.e. between V1 and V2
3. Infected DFU at the end of the run-in period, i.e. V2
4. Superinfected DFU (Grade 3-4 according to IDSA classification) including osteitis
5. Presence of necrotic tissue on the target DFU bed
6. DFU with exposed tendon or bone
7. Active Charcot’s foot
8. Presence of more than one plantar DFU in the limb of interest
9. Presence of plantar DFUs in both limbs

Treatment-specific exclusion criteria:
10. Concomitant treatment or treatment within 3 months prior to the enrolment with medications known to adversely affect the healing process or suspected of compromising the subject's immune system: i.e., systemic corticosteroids, cytostatic drugs, immunosuppressive agents
11. Treatment with topical antibiotics in the target wound area
12. Allergy to components contained in the IP
13. History of anaphylaxis or allergic reactions to any other allergens potentially affecting the study outcome

General exclusion criteria:
14. Clinically significant or unstable underlying/concurrent disease whose sequelae or treatment might interfere with the evaluation of study parameters, including autoimmune diseases, such as rheumatoid arthritis, vasculitis; immunocompromised states, such as HIV infection
15. Severe anemia (haemoglobin <8 g/dl) or hypoalbuminemia (albumin <2.5 g/dl) indicating a poor nutritional status (<3 months prior to inclusion)
16. Subject suffering from severe hepatic disorders (with serum activity of ALT/AST ≥2.5 UNL) or

severe renal disorders (creatinine clearance <30 ml/min) (<3 months prior to inclusion)
17. Presence of severe cardiac/cardiovascular conditions, i.e. NYHA Class III and IV congestive heart failure (CHF)
18. Subjects with a history of alcohol or drug abuse (within the previous 12 months), or heavy smoker (>25 cigarettes/day)
19. Major psychiatric disorders that, in the view of the Investigator, could compromise the patient's participation in the study
20. Positive or missing pregnancy test at the screening visit, or breastfeeding women
21. Concomitant participation in other clinical trials or participation in the evaluation of any IMDs /IMPs during 3 months before this study or previous participation in the same study
22. Participation in the study is also not permitted to employees of the Investigator or study centre with direct involvement in the trial or in other trials under the direction of that Investigator, as well as family members of the employees or the Investigator

Date of first enrolment
30/09/2021

Date of final enrolment
30/11/2022

Locations

Countries of recruitment
Poland

Study participating centre
NZOZ MIKOMED
ul. Pługowa 51/53; 94-238 Łódź
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Study participating centre
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Sponsor information

Organisation
IBSA Institut Biochimique S.A

Funder(s)

Funder type
Industry

Funder Name
IBSA Institut Biochimique S.A

Results and Publications

Individual participant data (IPD) sharing plan
The data-sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary
Data sharing statement to be made available at a later date