BTI Biotechnology Institute is a Spanish biomedicine company focused on the development of translational research projects (R&D+i).

BTI is a world-level scientific leader in regenerative medicine using ENDORET in different fields of medicine.

MORE THAN 5000 M² DEVOTED TO TRAINING, CLINICAL PRACTICE AND RESEARCH

WE TRAIN IN ORDER TO OPTIMISE THE CLINICAL RESULTS

**Specific training** aimed at different medical specialisations.

More than 40 scientific collaboration agreements with universities and research institutes all over the world.

More than **1200 students** per year of all nationalities.
TRANSITIONAL RESEARCH: KNOWLEDGE ACQUIRED IN THE LABORATORY APPLIED TO CLINICAL PRACTICE

Collaboration with experts from different countries in different fields of medicine for the development of clinically effective protocols.

MORE THAN 100 INDEXED SCIENTIFIC PUBLICATIONS BACK THE EFFECTIVENESS AND BIOSAFETY OF ENDORET®

20% of the workforce dedicated to research.

More than 15 years of research in tissue regeneration.

Prince Felipe Award for Technological Innovation.
Hundreds of endogenous proteins affect the tissue repair processes, including angiogenesis, chemotaxis and cell proliferation. No exogenic agent can effectively govern all these processes. (1)

Endoret technology provides the means necessary for the isolation and concentration of the blood proteins involved in tissue regeneration, as well as its suitable application at the injury site. (2)

2 ACTIVE SUBSTANCES

A. GROWTH FACTORS

ENDORET stimulates tissue regeneration due to its content in growth factors, in greater concentrations than those of blood. (3)

B. FIBRIN MEMBRANE

It is a temporary matrix that enables the balanced and gradual release of a large number of molecules, including growth factors and other proteins. (4) (5)
3 MECHANISMS OF ACTION

1. Promoting angiogenesis
2. Stimulating cell migration
3. Increasing cell proliferation
4. Decreasing pain and inflammation
5. Stimulating autocrine and paracrine secretion

ENDORET ACCELERATES CELL MIGRATION FOR REGENERATIVE PURPOSES

BASELINE (0H.)
CONTROL (24H.)
ENDORET® (24H.)

SCAN THE CODE WITH YOUR SMARTPHONE TO WATCH THIS VIDEO

ENDORET TECHNOLOGY® REDUCES THE TISSUE REPAIR TIME

RESPONSE OF THE TISSUE

NATURAL WOUND-HEALING PROCESS

PROCESS ACCELERATED WITH ENDORET TECHNOLOGY®
With Endoret technology we can make 3 different therapeutic formulations and adapt them to the different clinical goals. (11)

1. LIQUID

2. CLOT

3. FIBRIN MEMBRANE

4. THERAPEUTIC FORMULATIONS

5. SAFETY

Autologous product, there are no incompatibilities nor risk of rejection.

More than 700,000 patients have been treated in more than 20 countries, without any adverse effects being reported.

All the formulations of ENDORET have a bacteriostatic and bactericide effect, especially during the 4 hours after application. (12)(13)


1. IMPROVED SKIN CONSISTENCY

ENDORET decreases the elastosis, increases the proliferation of the cells and improves the secretion of procollagen. (16)

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BENEFITS OF THE TREATMENT

The infiltration of ENDORET promotes tissue remodelling in older skin affecting the hydration, angiogenesis and overall health of the skin. (14) (15)

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2. MORE HYDRATED SKIN

An increase in hyaluronic acid is linked to better hydration of the skin.

**THE SKIN IS SIGNIFICANTLY MORE HYDRATED WITH COMPARED TO TREATMENT WITH HYALURONIC ACID, UP TO 3 AND 6 MONTHS AFTER TREATMENT (14)**

**ENDORET® SIGNIFICANTLY INCREASES THE PRODUCTION OF ENDOGENOUS HYALURONIC ACID**

3. BETTER NUTRITION

Increase in the release of angiogenesis factors such as HGF and VEGF, that improve the blood flow and therefore the nutritional intake.

4. EFFECTS SUSTAINABLE OVER TIME

The activation of product enables the formation of a matrix in situ after the infiltration in the dermal area (18). Thus, the release of the Growth Factors is gradual prolonging the biological response.
The application technique of ENDORET on chronic skin ulcers **significantly accelerates the healing process** compared to conventional treatment.\(^{(19)}\)\(^{(20)}\)\(^{(21)}\)

**TREATMENT OF AN ULCER WITH ENDORET IN THE FORM OF A FIBRIN MEMBRANE.**

The autologous fibrin provides an excellent vehicle for the local release of growth factors, functioning as a matrix to support the new blood cells and help the migration of cells to the injured area.\(^{(18)}\)

**BENEFITS OF TREATMENT WITH ENDORET®**

**1. ACCELERATION OF HEALING**

The application of ENDORET to chronic skin ulcers significantly accelerates the healing process compared to conventional treatment.\(^{(21)}\)

**TREATMENT WITH ENDORET® ON CHRONIC ULCERS**

**ACHIEVED 73% HEALING AFTER 8 WEEKS COMPARED TO 21% OF THE CONTROL GROUP.\(^{(21)}\)**
The application of Endoret® accelerates the inflammatory process and increases the reepithelised area in wounds. (17) (19)

The use of the technology also is effective in other types of wounds such as burns or surgical wounds. (23)(24)(25)

2. REDUCTION OF INFLAMMATION

The application of Endoret® accelerates the inflammatory process and increases the reepithelised area in wounds. (17)(19)

3. EFFECT ANTISEPTIC EFFECT

All the formulations of Endoret® have a bacteriostatic and bacteriacidal effect. (13)

The use of the technology also is effective in other types of wounds such as burns or surgical wounds. (23)(24)(25)

(22) Aguirre JJ et al. Eficacia del PRGF-ENDORET en el tratamiento de las úlceras cutáneas secundarias a insuficiencia venosa: Ensayo clínico aleatorizado controlado con tratamiento convencional. Sent for publication.
COMPONENTS
OF ENDORET TECHNOLOGY®

1 ENDORET®
DISPOSABLE KIT
SINGLE-USE KIT*

* MEDICAL DEVICES CERTIFIED FOR APPLICATION IN DERMATOLOGY BY THE GERMAN NOTIFIED BODY TÜV

THIS KIT COMPLIES WITH THE REGULATIONS SPECIFIED IN THE INFORME/V1/23052013 OF THE SPANISH AGENCY OF MEDICINAL PRODUCTS AND MEDICAL DEVICES ON THE USE OF PLASMA RICH IN PLATELETS.

SYSTEM OF EXTRACTION

- 6 extraction tubes
- 1 winged extraction set
- 5 identification labels

MATERIAL FOR INFILTRATION

- 4 needles 30 G
- 4 needles 32 G
- 2 syringes BD 3 ml

FRACTIONING SYSTEM

- 4 fractioning tubes
- 1 Plasma Transfer Device®
- 2 activators
- 1 activation syringe

REFERENCE:
KMU10 KIT
LOGISTICS UNIT FOR 8 INDIVIDUAL TREATMENTS

12ML OF PRODUCT IS OBTAINED WITH EACH SINGLE-USE KIT.
2 ENDORET® EQUIPMENT*

- System IV Centrifuge
- Work rack
- Activation containers

* MEDICAL DEVICES CERTIFIED FOR APPLICATION IN DERMATOLOGY BY THE GERMAN NOTIFIED BODY TÜV

THIS KIT COMPLIES WITH THE REGULATIONS SPECIFIED IN THE INFORME/V1/23052013 OF THE SPANISH AGENCY OF MEDICINAL PRODUCTS AND MEDICAL DEVICES ON THE USE OF PLASMA RICH IN PLATELETS.

3 ENDORET® TRAINING

Exclusive training adapted to medical needs. We share our new clinical research and provide training for innovative, top-quality healthcare.

4 ENDORET® CERTIFICATION

We certify the clinical qualification and experience of our customers with our training certificates and BTI certification seals.
ADVANTAGES OF ENDORET TECHNOLOGY®

Endoret is the technology with the most experience on the market in the development of specific protocols for tissue regeneration, a pioneering technology manufactured exclusively by BTI Biotechnology Institute.

OPTIMUM CONCENTRATION OF PLATELETS
The right concentration of platelets affects the final efficacy. (26)

FREE FORMULATION OF LEUKOCYTES
The inclusion of leukocytes increases the pain and inflammation. (27)

CONTROLLED ACTIVATION
Enables the formation of the fibrin matrix in situ and the gradual release of growth factors, maintaining its efficacy over time. (28)

AUTOLOGOUS
It is made from the patient’s own blood, so there are no known adverse effects. (29)

REPRODUCIBLE
The protocol for the preparation process and its clinical application is strictly defined and tested.

VERSATILE
Three therapeutic formulations obtained in the same process means we can adapt the product to the patient’s clinical needs. (30) (31)

SAFETY AND REGULATORY ASSURANCE

The application of Endoret technology is a Medicinal Product for Human Use that complies with all the regulations required by the Spanish Agency of Medications and Medical Devices.

QUALITY ASSURANCE

· The ENDORET closed-technique system complies with the highest standards of quality.

· Both the technology and the materials related to it have the CE health certificate awarded by TÜV for their specific application in: Soft tissue regeneration for treating skin ulcers and treatment of skin aging.

GUARANTEES OF EFFICACY

· BTI has the greatest clinical support in the world published in this field; its effectiveness is proven in more than 100 international scientific publications.

ADDITIONAL GUARANTEES

· BTI certifies its customers' specific training in the use of this technology.

· In addition, BTI guarantees the traceability of its materials, and helps transfer all necessary information to its patients.