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.
20% of the workforce dedicated to research.

More than 15 years of research in tissue regeneration.

Prince Felipe Award for Technological Innovation.

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

A. GROWTH FACTORS

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

**QUANTIFICATION OF THE INCREASE IN VEGF (VASCULAR ENDOTHELIAL GROWTH FACTOR) AND PDGF (PLATELET DERIVED GROWTH FACTOR)**

- **VEGF pg/ml**
- **PDGF ng/ml**

* p<0.05

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 (6)
2. Stimulating cell migration (6)
3. Increasing cell proliferation (7)
4. Decreasing pain and inflammation (8)
5. Stimulating autocrine and paracrine secretion (8)

ENDORET® TECHNOLOGY® REDUCES THE TISSUE REPAIR TIME (9) (10)

RESPONSE OF THE TISSUE

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

SCAN THE CODE WITH YOUR SMARTPHONE TO WATCH THIS VIDEO

RESPONSE OF THE TISSUE (Reduction in recovery time)
With Endoret technology we can make 3 different therapeutic formulations and adapt them to the different clinical goals. (11)

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)


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

In photoaged skin, ENDORET has a collagen remodelling effect and also reduces the solar elastosis. (14,15)

ENDORET increases the proliferation of the cells and improves the secretion of procollagen. (16,17)

In photoaged skin, ENDORET has a collagen remodelling effect and also reduces the solar elastosis.

MORE HYDRATED SKIN

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

ENDORET significantly increases the production of endogenous hyaluronic acid. (16) (18)

The skin is significantly more hydrated compared to treatment with hyaluronic acid, up to 3 and 6 months after treatment (14)

MAINTAINED EFFECTS

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. (19)

The application technique of ENDORET on chronic skin ulcers significantly accelerates the healing process compared to conventional treatment. (20) (21) (22)

**ACCELERATION OF HEALING**

The application of ENDORET to chronic skin ulcers significantly accelerates the healing process compared to conventional treatment. (22)

Treatment with ENDORET® on chronic ulcers achieved 73% healing after 8 weeks compared to 21% of the control group (21)

ENDORET achieves healing in 8 weeks for 45% of long-term ulcers \(^{(23)}\)

![Graph showing % of wounds healed completely.](image)

**REDUCTION OF INFLAMMATION**

The application of ENDORET accelerates the inflammatory process, decreases pain and increases the reepithelised area in wounds. \(^{(18)}\)\(^{(20)}\)

**ANTISEPTIC EFFECT**

All the formulations of ENDORET have a bacteriostatic and bactericidal effect. \(^{(13)}\)

**OTHER TREATMENTS**

All the formulations of ENDORET have a bacteriostatic and bactericidal effect. \(^{(24)}\)\(^{(25)}\)\(^{(26)}\)

\(^{(23)}\) 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

COSMETIC KITS

KMU ESTHETICS
Get 8ml for skin infiltration
· Plus 8ml to make a facial mask
· It includes infiltration material

KMU 10
Recommended for integral treatments.
· Get a total of 24 ml of product

WOUND HEALING KIT

KMU HE
BTI innovation to get the Endoret membranes quicker and easier, with all Endoret regenerative properties.
2 ENDORET® EQUIPMENT*

- System IV Centrifuge
- Work rack
- Activation containers

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

THE APPLICATION OF ENDORET TECHNOLOGY COMPLIES WITH ALL THE REGULATIONS REQUIRED BY THE SPANISH AGENCY OF MEDICINES AND MEDICAL DEVICES, FOOD AND DRUG ADMINISTRATION AGENCY (FDA) AND EUROPEAN UNION. FOR EUROPEAN UNION OUR MEDICAL DEVICES ARE IDENTIFIED WITH CE MARK.

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.
ADVANTAGES
OF ENDORET TECHNOLOGY®

Endoret is the most experienced technology of 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)

LEUKOCYTE - FREE FORMULATION
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 complies with all the regulations required by the Spanish Agency of Medicines and Medical Devices, Food and Drug Administration Agency (FDA) and European Union.

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.