

LASEROBARIA 2.0_S
INNOVATIVE
TECHNOLOGY FOR
WOUND TREATMENT

INVENTMED

FOR WHAT PROFILE FACILITIES THE DEVICE IS?

The Laserobaria 2.0_S is a new, innovative method for **treatment of hard-to-heal wounds, edema, osteoarticular or neurological conditions**. The device is a multifunctional therapeutic device, **fully certified by the TUV Nord notified entity as a Medical Device in Class IIa**.

This treatment significantly improves competitiveness, complementing the services of facilities with the following profiles:

- clinics for the treatment of wounds, lymphedema, ulcers
- pain management clinics
- departments and clinics for the treatment of vascular diseases
- clinics for the treatment of diabetic foot and congestive disorders
- facilities with burns treatment
- orthopedic clinics
- specialists dealing with treatment of osteoporosis
- diabetology offices
- care facilities, i.e. elderly home, nursing home
- rehabilitation clinics



For clinics interested in expanding their offer with Laserobaria 2.0_S services, we have prepared flexible business cooperation models. We offer the possibility of medical consultations with doctors who already treat with laserobaria method, achieving positive results in terms of accelerating the treatment process for their patients.



In addition, we provide high-quality technical and service support at every stage of cooperation. For those who are interested, we help implement the innovative service into the local market, offering consultations in marketing, work organization and business plan. Our team includes experienced doctors, engineers, marketing specialists and people with many years of experience in managing medical facilities.

In the current state of technological and medical development, classical hyperbaric treatment applied in a hyperbaric chamber requires an investment of about €1.2 million. In addition, it does not offer the possibility of combined therapy with oxygen, ozone, magnetic field and light in one device.

No company on the market offers competitive solutions, only partial application of single factors. In addition, treatment based solely on the use of pharmacological drugs and wound dressings, will not enable tissue regeneration as quickly. The patient wastes valuable time. Time which, in the case of a threatened amputation, he does not have. The use of physical therapies delivered by LASEROBARIA 2.0_S complements conventional therapy and radically speeds up the healing process, often becoming the patient's only chance to retain a limb.

INVENTMED – WHO ARE WE?

Inventmed Ltd. was established in 2015. Our mission from the beginning was to create innovative medical solutions for a wide range of patients, with the aim of improving their health, increasing their quality of life and quick return to full participation in the broader socio-economic life. To this day, these values continue to guide the efforts of our company. Our main product is Laserobaria 2.0_S, created to effectively avoid limb amputations, treat joint and bone trauma or neurological problems and pain.

This is an invention of Prof. Alexander Sieronia, MD (national consultant in angiology in Poland), constructed and manufactured by INVENTMED Ltd. The device is fully certified by the TUV Nord notified entity as a Class IIa medical device.



FOR WHOM IS THE METOD OF LASEROBARIA 2.0_S?

Many people deal with pain or post-traumatic complaints on a daily basis. Others struggle with diabetic conditions that result in the appearance of more wounds, which are very difficult, long and painful to heal. In Europe, it is estimated that the number of patients with hard-to-heal limb wounds, burns and diabetic foot is close to 3,000,000 to 5,000,000 people. Crucially, the number of patients is a growing worldwide trend. Their quality of life can be improved by treatment with the Laserobaria 2.0_S device.

The Laserobaria method was developed to protect patients who are at risk of having a limb amputated as a result of a hard-to-heal wound that threatens health and life. Combined therapy based on four therapeutic factors is designed to accelerate tissue regeneration, thus speeding up the wound healing process. As a result, the patient has a chance to heal, improve life comfort and restore function without the need of a drastic method such as amputation.

In practice, the features of the four therapeutic factors are applied in a wider spectrum, including in the treatment of osteoarticular or neurological conditions.



INNOVATIVE TECHNOLOGY FOR WOUND TREATMENT

INDICATIONS IN WOUNDS AND EDEMA TREATMENT

- treatment of patients with complications of diabetes: diabetic foot,
- diabetic microangiopathy,
- treatment of wounds after amputations and surgical procedures,
- treatment of ulcers of the lower legs,
- treatment of decubitus ulcers,
- treatment of hard-to-heal wounds of the extremities,
- treatment of chronic wounds, of venous and arterial vascular insufficiency,
- treatment of purulent skin infections,
- treatment of burn injuries lesions of the limbs,
- reduction of edema of lymphatic etiology.

INDICATIONS IN ORTHOPEDIC BONE AND JOINT DISORDERS

- delayed bone growth,
- pseudarthritic joints,
- Sudeck type syndromes,
- post-traumatic conditions of joints and periarticular soft tissues - i.e. dislocations, sprains, contusions,
- damage to ligaments, tendon injuries,
- osteoporosis,
- joint inflammations.

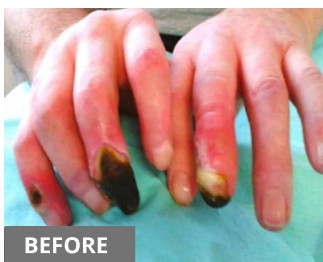
INDICATIONS IN NERVOUS SYSTEM

- neuralgie,
- nerwobóle,
- bóle fantomowe

FEATURES OF THE DEVICE

- **innovation** - the only device worldwide providing a combination of 4-in-one therapeutic factors,
- **low invasiveness due to the local application**, without stressing the whole body,
- **personalization of therapy** - selection of time and intensity of each individual factor according to the stage of the patient's treatment,
- **holistic approach** thanks to the combined therapy of four therapeutic factors,
- **high mobility** provided by the use of large, lockable wheels - ability to approach the patient's hospital bed with the device
- **low operating costs** and low electricity consumption,
- easy-to-use interface,
- possibility to use even in small spaces (20 sqm),
- design features such as a treatment couch compatible with the device to support a healthy limb, infinitely adjustable back and heading, a shelf for an oxygen concentrator.

RESULTS OF LASEROBARIA 2.0_S TREATMENT

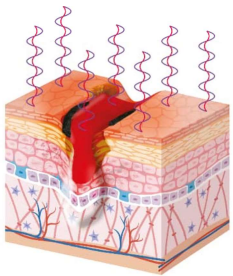


LASEROBARIA 2.0_S is 4 different wound treatment methods in one device. This directly transforms into great benefits for medical facilities and Patients, thanks to the synergy created by using several medical procedures within one device and one therapeutic cycle.

The device allows alternating the use of local hyperbaic oxygene, ozone, red light therapy and ultraviolet light, and variable magnetic field.



VARIABLE MAGNETIC FIELD

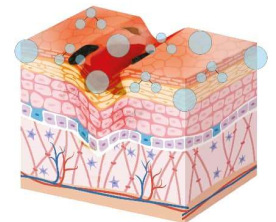


It has a beneficial effect on tissue respiration and regeneration processes. Also, through its anti-inflammatory and anti-edematous effects, along with the increase of beta-endorphin release processes, it has a **strong analgesic effect**. It has also been found to act on the structures of cell membranes by modifying their properties, induces an immune enzymatic response, and has an **effect on collagen and creatine production**.

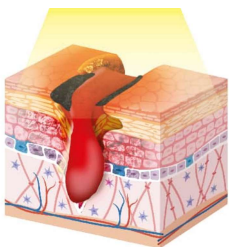
OZONE THERAPY

Ozone is a powerful **bactericidal, fungicidal and virucidal factor**. It oxygenates cells and improves cell metabolism.

The biocidal and virucidal effects of ozone are crucial in the treatment and prevention of infected wounds.



PHOTOTHERAPY – RED LIGHT AND ULTRAVOLETE LIGHT



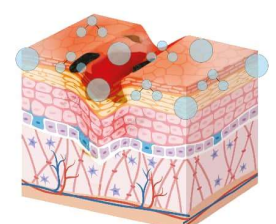
During treatment, different wavelengths are absorbed by the skin, **stimulating the skin's natural healing processes** and **reducing the intensity of pain**. Red light increases blood and oxygen flow and produces oxygen free radicals that destroy bacteria. This therapy is beyond beneficial in the treatment of diabetic foot. Ultraviolet light is used in this therapy as a germicidal booster.

This form of therapy is **traditionally described as laser therapy**, but the actual technology used is the Laser Equivalent Led because it uses light-emitting diodes.

HIPERBARIC OXYGEN THERAPY

By penetrating the skin, wound and increasing oxygen to the tissue, it promotes tissue oxygen-dependent physiological repair processes. Consequently, it **improves tissue regeneration and wound healing** in atherosclerosis, venous thromboembolism and diabetic foot.

It is used to treat complications after radiation therapy of soft tissues and bones, as well as injuries, including in competitive sports.



PROCESS OVERVIEW

1. The doctor consults the patient during the qualifying visit, specifies the details of the treatment process, in which one of the methods applied is the Laserobarria 2.0_S treatment.
2. The cost of the qualifying visit is the same as the cost of any other consultation with the doctor - the visit represents additional income for the doctor and the facility.
3. During the visit, the doctor defines the parameters of Laserobarria 2.0 S therapy (the amount and time of application of hyperbaric oxygen therapy, ozone therapy, red light therapy, ultraviolet light therapy, magnetic field therapy) - the details are written out on the referral sheet.
4. The patient makes an appointment for a series of treatments.
5. The beginning of the session - the nurse cleans the wound, puts a sealing sterile pack on the limb and sets the device according to the parameters specified by the doctor on the referral.
6. Session with application of following therapeutic factors.
7. End of the session - the nurse applies a new wound dressing.
8. Disinfection of the device.
9. At the end of the series of treatments, the patient comes for a follow-up visit.



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