

# ACCELERATED WOUND HEALING AND PAIN RELIEF







#### **LEADERS IN LIGHT THERAPY**

BIOPTRON Medical Device is made in Switzerland, home of the highest quality production values www.bioptron.com



#### A UNIQUE, PATENTED LIGHT THERAPY MEDICAL DEVICE

BIOPTRON Light Therapy is a clinically proven therapeutic technology offering accelerated healing and pain relief.

BIOPTRON Light Therapy emits polarised low energy light, producing a biostimulative effect that is highly effective as adjunctive and monotherapy.

BIOPTRON's specific polychromatic light spectrum (wavelength 480 nm to 3,400 nm) includes visible and infrared radiation – similar to that of the sun but without potentially harmful UV radiation.

### BIOSTIMULATIVE EFFECT PROMOTES ACCELERATED HEALING AND EFFECTIVE PAIN RELIEF

BIOPTRON Light Therapy has a stimulating effect on the immune system leading to faster and more effective healing of wounds.

BIOPTRON Light Therapy has strong analgesic effects leading to rapid and long lasting pain relief.





Dermatological disorders and Seasonal Affective Disorders (SAD) also respond well to BIOPTRON Light Therapy – a more comprehensive list of indications for this unique therapeutic option follows.



#### **EXTEND YOUR SPECTRUM OF CARE**

BIOPTRON Light Therapy has a broad spectrum of therapeutic indications – it improves the structural framework of damaged tissues<sup>1</sup>, stimulates the immune system<sup>2</sup> and provides strong analgesic effects<sup>3</sup>.

#### WOUND HEALING

- Wound healing after trauma (injuries)<sup>5</sup>
- Burns<sup>5/6</sup>
- Grafting
- Wound healing after operations<sup>4</sup>
- Venous leg ulcers (stasis ulcers)8
- Decubitus (pressure ulcers)

#### **PAIN RELIEF**

- Rheumatology
- Osteoarthritis
- Rheumatoid arthritis (chronic)<sup>9</sup>
- Arthroses
- Physiotherapy
- Low back pain
- Shoulder and neck pain<sup>10</sup>
- Carpal tunnel syndrome<sup>11</sup>
- Scar tissue
- Musculoskeletal injuries<sup>10</sup>
- Sports medicine such as soft tissue injuries of muscles, tendons and ligaments:
- muscle spasm, sprains, strains, contusions, tendonitis, desmorrhexis and myorrhexis (ligament and muscle tears), epicondylitis (tennis elbow)<sup>12</sup>

#### **DERMATOLOGICAL CONDITIONS**

- Acne
- Acne rosacea
- Atopic dermatitis
- Psoriasis
- Superficial bacterial infections
- Herpes simplex
- Herpes zoster
- Mucosal lesions

#### **PEDIATRICS**

- Dermal affections
- Endogenous eczema
- Upper respiratory tract infections
- Allergic respiratory diseases
- Musculoskeletal disorders and neurological disorders and deficits

#### **NEWBORNS**

Dermal afflictions such as phlebitis, decubitus, and intertrigo

#### **SEASONAL AFFECTIVE DISORDERS (SAD)**

- Chronic fatigue syndrome
- Hypersomnia
- Lowered motivation
- Asthenic conditions
- Break down

## CLINICALLY PROVEN EFFICACY AS ADJUNCTIVE AND MONOTHERAPY IN ADULTS AND CHILDREN











#### **BIOPTRON LIGHT THERAPY:**

- Unique and specific polarised, incoherent, polychromatic, low energy light system
- Biostimulative effect stimulates regenerative and reparative processes and reinforces the human defence system
- Clinically proven to heal a broad spectrum of wounds and dermatological conditions and to relieve pain
  - Short treatment time
  - No negative side effects
  - Easy-to-use
  - Can be used both in the clinical setting and in the patient's home



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#### References:

1. Bolton P et al. The effect of polarized light on the release of growth factors from the U-937 macrophage-like cell line. Laser Therapy 1992; 33-37. Tissue Repair Research Unit, Division of Anatomy and Cell Biology, United Medical and Dental School of Guy's and St. Thomas's. Guy's Hospital campus, London SE1 9RT, UK. 2. Fenyo M, Mandl J, Falus A. Opposite effect of linearly polarized light on biosynthesis of interleukin-6 in a human B lymphoid cell line and peripheral human monocytes. Cell Biol Int. 2002;26(3):265-9. 3. Bjordal JM, Johnson MI, Iversen V, et al. Photoradiation in acute pain: a systematic review of possible mechanisms of action and clinical effects in randomized placebo-controlled trials. Photomed Laser Surg 2006;24:158-68. 4. Colić MM, Vidojković N, Jovanović M, et al. The use of polarized light in aesthetic surgery. Aesthetic Plast Surg 2004;28:324-7. 5. Monstrey S, Hoeksema H, Depuydt K, et al. The effect of polarized light on wound healing. Eur J Plas Surg 2002; 24: 377-382. 6. Monstrey S, Hoeksema H, Saelens H, et al. A conservative approach for deep dermal burn wounds using polarised-light therapy. Br J Plast Surg 2002;55:420-6. Department of Plastic Surgery, University Hospital Gent, Belgium. 7. Iordanou P, Baltopoulos G, Giannakopoulou M, et al. Effect of polarized light in the healing process of pressure ulcers. Int J Nurs Pract 2002;8:49-55. 8. Coce F et al. Approach to neuropathic and neuroischaemic foot ulcers in diabetic patients using lineary polarized light therapy. Presented at 18th International Diabetes Federal Congress, Paris 24-29 July 2003. 9. Kozlovskaya LE, Ulaschik VS. The experience of clinical trial use of Bioptron devices. Experience report from Belarussian Academy of Postgraduate Training 2001. 10. Ballyzek MF, Vesovic-Potic V, He X, et al. Efficacy of polarized, polychromatic, non-coherent light in the treatment of chronic musculoskeletal neck and shoulder pain. In Press. This clinical trial was used for FDA submission of Bioptron light therapy in pain (FDA clearanc

