Kleresca® Scientific Overview

Summary of the latest scientific publications on fluorescent light energy (FLE) and its benefits in different skin conditions.

KLERESCA® BIOPHOTONIC TECHNOLOGY

EDGE, D. 2019. FLUORESCENT LIGHT ENERGY: THE FUTURE FOR TREATING INFLAMMATORY SKIN CONDITIONS?

The study has the aim to investigate the cellular mechanisms of action of FLE on key skin and immune cells. FLE serves both aesthetic and therapeutic purposes by enhancing collagen production, modulatin cutaneuous inflammation and encouraging angiogenesis.

Edge, D. *et al.* J Clin Aesthet Dermatol (2019);12(5):E61–E68.

JALILI, A. 2018. CHROMOPHORE GEL-ASSISTED PHOTOTHERAPY. A NOVEL AND PROMISING PHOTOBIOMODULATION THERAPY FOR FACIAL INFLAMMATORY SKIN DISEASES AND SKIN AGING

Explanatory article about the documented benefits of photobiomodulation and FLE. The article points the advantages in acne, skin rejuvenation, and its potential as an alternative therapeutic option to conventional therapies.

Jalili, A. J Ästhet Chir (2018) 12(Suppl 1):1.

KLERESCA® ACNE TREATMENT

KOCEVA, I. *ET AL.* FLUORESCENT LIGHT ENERGY. A NEW THERAPEUTIC APPROACH TO EFFECTIVELY TREATING ACNE CONGLOBATA AND HIDRADENITIS SUPPURATIVA

The Kleresca® platform, utilising fluorescent light energy (FLE), effectively treated both acne conglobata and hidradenitis suppurativa. FLE offers a new treatment approach to recalcitrant inflammatory skin conditions.

Koceva, I. *et al.* Clinical Case Reports, 2019; 00:1-4.

MAHENDRAN, A. 2018. TREATMENT OF ERLOTINIB-INDUCED ACNEIFORM ERUPTION WITH CHROMOPHORE GEL-ASSISTED PHOTOTHERAPY

A case study of a 49-year old patient suffering from acne eruption induced by erlotinib treatment. After trying different oral and systemic treatments, the use of Kleresca® Acne Treatment reduced notably the severity of her acne.

Mahendran, A. *et al.* Photodermatol Photoimmunol Photomed (2018) Dec 16. [Epub ahead of print]

NIKOLIS, A. 2018. AN EXTENSION OF A MULTICENTER, RANDOMIZED, SPLIT-FACE CLINICAL TRIAL EVALUATING THE EFFICACY AND SAFETY OF CHROMOPHORE GEL-ASSISTED BLUE LIGHT PHOTOTHERAPY FOR THE TREATMENT OF ACNE

Extension trial to evaluate the efficacy of the biophotonic system as well as the duration of response. The study confirmed the long duration of effect following treatment as well as excellent patient safety profile.

Nikolis, A. *et al.* Int J Dermatol. 2018 Jan; 57(1):94-103.

CARRASCO & JIMÉNEZ, 2018. BIOPHOTONIC THERAPY IN ACNE TREATMENTS (BOOK CHAPTER IN 'ACNE: NEW THERAPIES AND COSMETIC TREATMENTS')

Book chapter that explains the clinical experience in the use of Kleresca® (biophotonic therapy) for the treatment of acne patients. The document explains also the efficacy and the patient satisfaction obtained in the clinic..

Carrasco & Jiménez. Chapter 4 in López Estebaranz, 2018 Acné: Novedades terapéuticas y tratamientos cosméticos. Grupo Aula Médica, S.L., 2018.

ANTONIOU, C. 2016. MULTICENTER, RANDOMIZED, SPLIT-FACE CLINICAL TRIAL EVALUATING THE EFFICACY AND SAFETY OF CHROMOPHORE GEL-ASSISTED BLUE LIGHT PHOTOTHERAPY FOR THE TREATMENT OF ACNE

A 12-week clinical trial to evaluate the efficacy and safety of the biophotonic system in the treatment of moderate to severe acne vulgaris. The treatment was found to be efficacious and safe, with a sustained clinical response at 12 weeks for the management of moderate to severe facial inflammatory acne.

Antoniou, C. *et al.* Int J Dermatol. 2016 Dec; 55(12):1321-1328.

KLERESCA® ROSACEA TREATMENT

LIU, R. C. 2019. TREATMENT OF GRANULOMATOUS ROSACEA WITH CHROMOPHORE GEL-ASSISTED PHOTOTHERAPY

Patient with a 3 month history of papulopustular eruption result of granulomatous rosacea. A modest improvement was observed with topical systemic treatments. After Kleresca®, there was a significant improvement and no relapse after 6 months it was finalized.

Liu, R. C. *et al.* Photodermatol Photoimmunol Photomed. 2019; 1–2.

SANNINO, M. 2018. FLUORESCENT LIGHT ENERGY (FLE): TREATING ROSACEA SUBTYPES 1, 2 AND 3

Patients were treated with FLE in order to investigate the role in the treatment in targeting inflammation and erythema in rosacea subtypes 1, 2 and 3. Results proved FLE to be effective with an improvement in the skin texture of the patient.

Sannino, M. *et al.* Clin Case Rep. 2018 Oct 25; 6(12):2385-2390.

BRAUN, S. A. 2017. A PHOTOCONVERTER-GEL ASSISTED BLUE LIGHT THERAPY FOR THE TREATMENT OF ROSACEA

Patient suffering from papulopustular rosacea receives fluorescent light energy (FLE) treatment. After 5 weeks, the patient showed a marked reduction of the inflammatory reaction and an overall improvement of the large-pored skin type.

Braun, S.A. *et al.* Int J Dermatol. 2017 Dec; 56(12):1489-1490.

KLERESCA® SKIN REJUVENATION

NIKOLIS, A. 2016. A RANDOMIZED, PLACEBO-CONTROLLED, SINGLE-BLINDED, SPLIT-FACED CLINICAL TRIAL EVALUATING THE EFFICACY AND SAFETY OF KLOX-001 GEL FORMULATION WITH KLOX LIGHT-EMITTING DIODE LIGHT ON FACIAL REJUVENATION

Evaluation of the efficacy and safety of the skin rejuvenation treatment with fluorescent light (FLE). The evaluation was done comparing skin biopsies and the increase of collagen from baseline.

Nikolis, A. *et al.* Clin Cosmet Investig Dermatol. 2016 May 13; 9:115-25.

KLERESCA® PRE-POST TREATMENT

GERBER, P. A. (2019). BIOPHOTONIC PRE-TREATMENT ENHANCES THE TARGETING OF SENILE LENTIGINES WITH A 694NM QS-RUBY LASER

Combination of Kleresca® FLE to intensify and demask underlying solar lentigines before targeting them with laser therapy. Kleresca® FLE successfully intensify solar lentigines, preparing the skin before and rejuvenating it after more invasive therapies.

Gerber, P. A. *et al.* Photodermatol Photoimmunol Photomed. 2019;00:1–2.

SCARCELLA, G. 2018. TREATMENT OF SOLAR LENTIGINES USING A COMBINATION OF PICOSECOND LASER AND BIOPHOTONIC TREATMENT

The goal of the study was to combine combines two techniques, (laser and biophotonics) to achieve long-term results with moderate to significant improvement in the overall appearance of facial pigmentation, with high patient satisfaction.

Scarcella, G. *et al.* Clin Case Rep. 2018 Aug 9; 6(9):1868-1870.