

# rhinolight

Clinically proven  
phototherapy  
of allergic rhinitis



Scientists at the University of Szeged developed the revolutionary Rhinolight® phototherapy in 2001. Since then, Rhinolight® phototherapy has given a better quality of life to tens of thousands of patients suffering from allergic rhinitis.

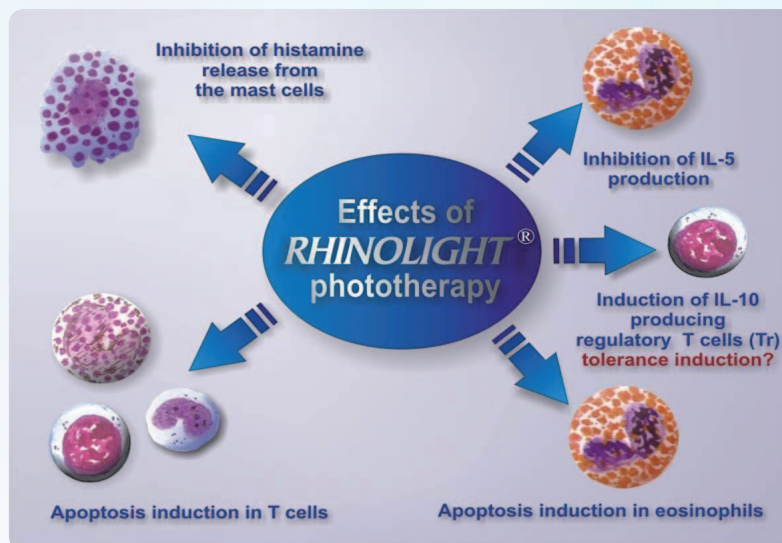
[www.rhinolight.eu](http://www.rhinolight.eu)

## RHINOLIGHT® PHOTOTHERAPY A BRAND NEW MEDICAL TREATMENT FOR ALLERGIC RHINITIS



- Rhinolight® is a high intensity light of a special composition. Exposing the nasal mucosa to this light reduces or even eliminates most symptoms of allergic rhinitis.
- This painless medical treatment takes only a few minutes. The quality of life of patients often improves after just one or two treatments due to the outstanding efficacy of Rhinolight®.
- The phototherapy may give a lasting effect in both seasonal and perennial allergic rhinitis.
- Rhinolight® can be used as monotherapy or combined with antihistamines and/or steroids.<sup>4</sup>
- Rhinolight® is the only phototherapy with a clinically justified effect for the treatment of allergic rhinitis.<sup>1,2,4,5,6</sup>

### THE CLINICALLY TESTED EFFECTS OF THE PHOTOTHERAPY<sup>1</sup>

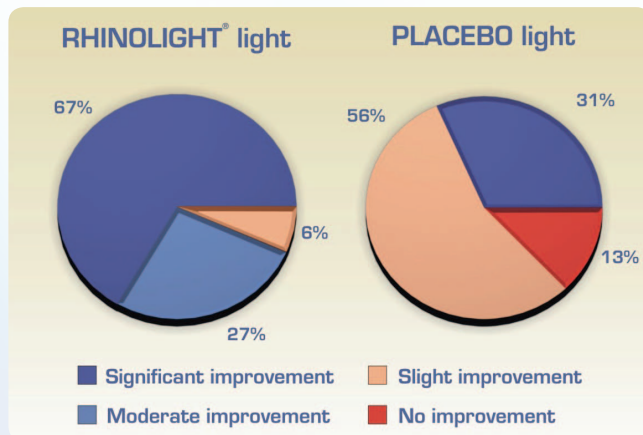


The treatment blocks both early and late phases of the allergic reaction

- Blocks histamine release from mast cells.
- Induces apoptosis of eosinophils and lymphocytes.
- Reduces the number of eosinophil cells.
- Reduces the quantity of ECP and IL-5 in nasal secretions.
- Inhibits the immediate type hypersensitivity reaction in skin. (Skin Prick Test, SPT).<sup>3</sup>



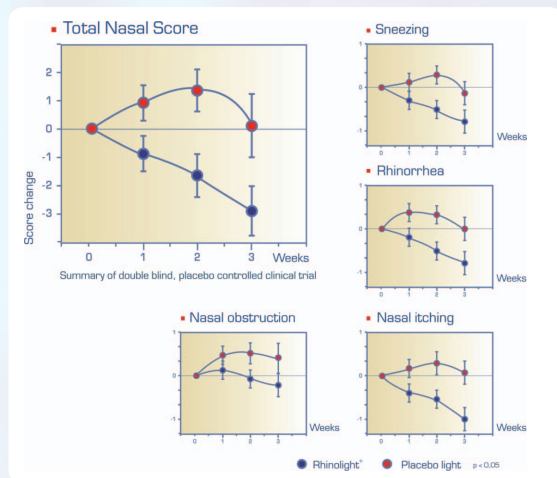
## EFFECTIVENESS OF THE THERAPY ACCORDING TO PATIENTS INVOLVED IN CLINICAL TRIALS<sup>1,4</sup>



Double blind placebo controlled clinical trial<sup>1</sup>

- All patients treated by Rhinolight® reported that nasal symptoms (nasal itching, sneezing, rhinorrhea, nasal obstruction) were significantly reduced or even eliminated; whilst patients treated with a placebo light reported no improvement.
- Patients received no other form of treatment during Rhinolight® therapy. They suffered from allergic rhinitis resistant to medical treatment.
- The durability of Rhinolight® treatments proved to be longer than 3 months after the usual 6-treatment regimen.<sup>4</sup>

## EFFECTS OF RHINOLIGHT® PHOTOTHERAPY ON THE CLINICAL SYMPTOMS OF ALLERGIC RHINITIS<sup>1</sup>



## TREATMENT PROTOCOL

- Rhinolight® treatments take place within two successive weeks.
- Altogether 6 treatments are required.
- The first treatment takes 2 minutes and the maximum treatment time is 3 minutes for each nostril.
- The therapy can be repeated with the appearance of a new allergic reaction or at the onset of a new pollen season.
- In some cases dryness of the nasal mucosa occurs, this can be successfully treated with Vitamin A oil.
- Children under the age of 14 years should only be treated after considering the risk/benefit ratio.

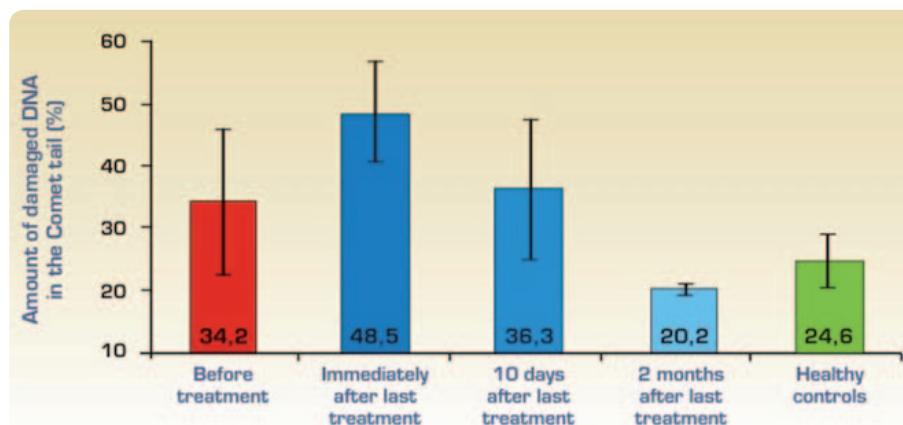
## COMPARISON OF EFFICACY WITH DRUGS AND SAFETY DATA

- The Rhinolight® treatment is also effective if compared with drugs, because...

According to the results of a comparative study, Rhinolight® phototherapy, applied twice a week for two weeks, was more effective than oral fexofenadine (180 mg) at reducing the clinical symptoms of allergic rhinitis.<sup>5,6</sup>

- The Rhinolight® treatment is safe, because...

A Comet assay showed that levels of damaged DNA in the nasal mucosa had fallen to below the levels of healthy controls within two months of the last treatment.<sup>7</sup>



Determination of the extent of DNA damage caused by Rhinolight® treatments applying the Comet assay<sup>7</sup>

## References:

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2. Detlef Brehmer: Endonasal phototherapy with Rhinolight® for the treatment of allergic rhinitis. Expert Rev. Med. Devices 7(1), 21-26 2010
3. Koreck A, Csoma Zs, Ignacz F, Bodai L, Dobozy A, Kemény L: Inhibition of immediate type hypersensitivity reaction by combined irradiation with ultraviolet and visible light. J Photochem Photobiol B: Biology, 2004, 77: 93-96
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5. Lajos Kemény, Andrea Koreck: Ultraviolet light phototherapy for allergic rhinitis. Review in the Journal of Photochemistry and Photobiology B: Biology 87 (2007) 58-65
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7. L. Kemény, A. Koreck, A. Szechenyi, M. Morocz, A. Cimpean, Zs. Bella, E. Garaczi M. Raica, T.R. Olariu, I. Rasko: Effects of intranasal phototherapy on nasal mucosa in patients with allergic rhinitis. Journal of Photochemistry and Photobiology B: Biology 89 (2007) 163-169

## Certificates:

- Directive 93/42/EEC
- ISO 9001:2008
- ISO 13485:2003



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