Final Report

Control of the efficacy of the wearable air purifier Respiray Wear A+ in allergic rhinitis caused by dust mites

Respiray OÜ

Respiray Wear A+

ECARF
For a Better Life with Allergies

1. General information

1.1 Confidentiality notice

The contents of the protocol are to be treated confidentially and may not be passed on to uninvolved parties, either verbally or in writing, without the consent of Respiray and ECARF Institute GmbH.

1.2 Responsibilities

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Director of Studies	Prof. Dr. med. Dr. h. c. Torsten Zuberbier
Study doctor	Prof. Dr. med. Karl-Christian Bergmann, specialist in respiratory and bronchial medicine, internal medicine, allergology

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Torsten Zuberbier

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4. Results and Clinical Implications

For people suffering from dust mite allergy, it is interesting to know whether wearing a wearable air purifier also protects against dust mites and thus avoids medical complaints even without medication. A majority of people with a dust mite allergy always ask their physician "what can I do besides taking drugs?". Two recent international publications summarize the few evaluated options to do so for pollen allergic subjects and it becomes clear from the publications that there are also only a few non-drug methods of protection against dust mites that have been scientifically proven and were successful. Among these the Respiray Wear A+ is now one of the best methods.

To evaluate such an "anti-dust mite effect", 37 adults with confirmed allergic rhinoconjunctivitis were exposed to dust mites in an allergen exposure chamber for 60 minutes in a standardized manner with and without the device.

Wearing the Respiray Wear A+ leads to a significant reduction in Total Symptom Score (~50%), including nasal and conjunctival symptoms in subjects with an allergic rhinoconjunctivitis due to dust mites. The 55% reduction in nasal symptoms is particularly remarkable because nasal symptoms are the most debilitating symptoms. About 80% of patients report eye problems; these symptoms are also reduced by approx. 40%. Therefore, the well-being is supported during dust mite exposure.

Very interesting is the lower incidence of delayed reactions after using Respiray Wear A+ compared to dust mite exposure without the Respiray device. The occurrence of allergic asthma caused by dust mites is promoted by the onset of delayed reactions and these should therefore be avoided as far as possible.

The study makes it clear that people with a dust mite allergy experience a significant benefit from using the Respiray Wear A+ even without any drug therapy.

Wearing the Respiray Wear A+ can be recommended from a medical point of view as an effective non-drug option for those allergic to dust mite.