

Blue Light Phototherapy for treatment of chronic skin conditions

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The presentation starts with observations of general trends in Technologies and Healthcare leading to new innovations in phototherapy. In particular, at Philips the Blue LED Light platform has been developed and intensively studied from a research and medical/clinical application perspective. For example, UV-Blue LED Light at 453 nm has been shown to be non-toxic to the skin up to doses of 500 J/cm². It reduces the proliferation of keratinocytes dose-dependently while inducing differentiation. In addition, irradiation with blue LED light has been shown to be anti-inflammatory, i.e. it leads to dose-dependent suppression of dendritic cell activation, resulting in a reduced proliferation of T-cells and release of cytokines.

Based upon these scientific insights, Philips Light & Health has conducted various clinical investigations with patients proving that Blue LED Light is effective and safe in the treatment of Psoriasis vulgaris and Eczema.

Speaker Biography

Matthias Born is working at Philips Group Innovation and various business units. Next to that he is professor at the University of Düsseldorf, Germany. Born has a PhD and habilitation in Physics and a broad background in various scientific and medical technology areas. At Philips he has built up the domain "Light & Health" which he is heading as Director and Principal Scientist including "Clinical & Scientific Affairs" of the Business. Here, new innovative phototherapies for applications in dermatology, such as Philips BlueControl for UV-free treatment of Psoriasis Vulgaris, are developed and brought to the market.

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