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Korean firm clinically evaluates blue light impact on skin

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Amorepacific published an SCI-grade research paper on the harmfulness of blue light as well as a clinical evaluation method for blocking blue light and its efficacy



The Anti-Pollution Research Center of Amorepacific R&D Center, a South Korean beauty and cosmetics conglomerate, has developed the world's first clinical evaluation method for blocking blue light from reaching the skin.

The research paper, which involves research on the harmful effects of blue light on the skin, the development of clinical devices, verification of the efficacy of blocking agents and so on, has been published in the August 18, 2020 issue (the 19th issue of 2020) of *The Journal of Cosmetic Dermatology*, which is the SCI-grade international academic journal. (Paper name: *Clinical evaluation method for blue light (456 nm) protection of skin*).

Cho Hong-ri, a senior researcher of the Anti-Pollution Research Center in Amorepacific R&D Center, has developed a device that can detect blue light wavelengths that are harmful to the skin and can clinically evaluate blue light blocking performance at those wavelengths.

The new device developed by Amorepacific produces blue light wavelengths that modern people are often exposed to due to artificial lighting emitted by smartphones, TVs, etc. In addition, by finely adjusting the intensity and time of light, the device also makes it easier to conduct clinical evaluations on skin damage that people can experience in their daily lives due to exposure to the blue light.

Through an experiment using the clinical device, Amorepacific R&D Center revealed the fact that blue light with a wavelength of 456 nm causes skin pigmentation. Based on the finding, Amorepacific tested whether a blue light blocker developed and released by the company itself can actually prevent skin pigmentation with the company subsequently proving the blue light blocking effects of the blocker on the basis of the measurement of changes in melanin index values, etc.

The research is first of its kind in the world and was presented at IFSCC (International Federation of Societies of Cosmetic Chemists) conference held in Munich, Germany in 2018.

Moving forward, Amorepacific plans to conduct further research on the environmental effects and the resulting changes in skin and continue developing products to protect the skin health of customers around the world.