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Photodiagnosis and Photodynamic Therapy

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Letter to the Editor

Ultraviolet-based biophotonic technologies and COVID-19

Dear Editor,

I would like to share ideas on "Ultraviolet-based biophotonic technologies for control and prevention of COVID-19, SARS and related disorders [1]." Nogueira proposed that "UV-based optical and biophotonic technologies can significantly help overcoming the COVID-19 pandemic as well as prove its safe use in research and industry [1]." In fact, UV technology has proven useful for pathogen control and it is also applicable for the present COVID-19 crisis (such as UV germicidal irradiation [2]). However, developing of safe technologies that has low risk of UV induced unwanted adverse effect is an important issue for discussion. At present, a main question is usually on safety of UV radiation. It is perceived that UV might induce dermatological damage, trigger cancer formation and cause eye problems. To reassure the general user, we have to have guidelines and further confirmation on efficacy and safety of any new UV-based technologies for control or prevention of COVID-19 or other infections.

Declaration of Competing Interest

None.

References

- M.S. Nogueira, Ultraviolet-based biophotonic technologies for control and prevention of COVID-19, SARS and related disorders, Photodiagnosis Photodyn. Ther. (June) (2020) 101890, https://doi.org/10.1016/j.pdpdt.2020.101890 Online ahead of print.
- [2] E. Pauley, C. Powers, D. Koch, D. Ellenbecker, R. Crilly, J. McKee, A. Akhtar, S. Piebenga, D. Petereit, E.F. Dunn, Ultraviolet germicidal irradiation to decontaminate filtering face piece respirators during COVID-19 pandemic, S. D. Med. 73 (May (5)) (2020) 212–216.

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