JEAN-FRANÇOIS DORÉ

Directeur de Recherche Honoraire à l'INSERM

To: Expert Committee on Selection and Use of Essentials Medicines World Health Organization Geneva

Re. WHO EML Application Process: A.25 Sunscreen, broad-spectrum – prevention of skin cancer in people with albinism

Lyon, April 18 2025

Dear Committee Members,

I do strongly support the application submitted by the Global Albinism Alliance to the WHO for broad-spectrum sunscreen for persons with albinism to be included in the WHO's Essential Medicines List.

Now retired, but still having a scientific activity, I was Head of an INSERM (The French National Institute for Health and Medical Research) Research Unit, and I devoted a large part of my scientific activity to epidemiology and prevention of melanoma and skin cancers and biological effects of ultraviolet radiation. In this respect, I served for a term in the Scientific Committee on Cosmetics and Non-Food Products intended for consumers (European Commission, DG SANCO, Brussels), I was president of Sécurité Solaire (a WHO Collaborating Center on solar education, Paris), and I am currently a member of the WHO International Advisory Committee on Non-Ionizing Radiation (Geneva).

Albinism, a rare genetic condition that affects melanin synthesis in skin melanocytes, confers a high susceptibility to harmful effects of UV radiation. Persons suffering from albinism exposed to solar UV radiation develop premature skin aging and early onset skin cancers reducing their life expectancy: they must be protected. Unfortunately, many patients with albinism live in sunny countries.

Solar prevention relies on several interventions such as seeking shade and wearing clothes, and also includes the use of sunscreens for unprotected skin areas.

Sunscreens efficiently prevents skin cancers. This was shown as early as 2000 by a IARC Working Group for squamous cell carcinoma (IARC 2001), and later for melanoma. Recurrent controversies frequently based on poor quality studies and even on complotists views, have challenged the efficiency of sunscreens to prevent skin cancers. Several well-conducted randomized controlled trials with long follow-up showed that sunscreen use reduces the risk of squamous cell and melanoma skin cancers, and to a lesser extent basal cell cancers (see for review Sander et al. 2020). It is also crystal clear that sunscreen use may prolong sun exposure (Autier et al. 2007). But this is a behaviour of intentional sun exposure among sun seekers and beach goers, and certainly not that of people with albinism who know that they have to avoid sun exposure. Finally, concern was expressed that sunscreen use could prevent vitamin D synthesis in the skin. However, a recent review concluded that « studies do not support causal associations between routine sunscreen use and hypovitaminosis D » (Abdel Azim et al. 2025), and, in addition, a study recently found that « in all skin phototypes the duration of sun exposure required to induce erythema was generally longer than that to produce vitamin D » (Brogniez et al., 2021).

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Therefore, it is of utmost interest that people suffering from albinism have access to broad-spectrum sunscreen SPF50+ with high protection against UVA. As mentioned in the application, « Adding sunscreen to the EML/EMLc will contribute to ensuring free or reduced cost of sunscreen for person with albinism, who are disproportionately affected by poverty, particularly in developing and least developed countries ».

Thanking you for the consideration you will give to this comment,

Very truly yours

References cited

Abdel Azim S, Bainvoll L, Vecerek N, De Leo VA, Adler BL. Sunscreens part 2: Regulation and safety. *JAAD* 92: 689-698, 2025.

Autier P, Boniol M, Doré JF. Sunscreen use and increased duration of intentional sun exposure: Still a burning issue. *Int. J. Cancer*: 121, 1–5, 2007.

Brogniez C, Doré JF, Auriol F, Cesarini P, Minvielle F, Deroo C, Catalfamo M, Metzger JM, Da Conceicao P. Erythemal and vitamin D weighted solar UV dose-rates and doses estimated from measurements in mainland France and on Reunion Island. *J Photochem Photobiol B*. 225: 112330, 2021.

IARC Working Group on the Evaluation of Cancer Preventive Agents. Sunscreens. IARC handbooks of cancer prevention vol. 5, Lyon 2001.

Sander M, Sander M, Burbidge T, Beecker J. The efficacy and safety of sunscreen use for the prevention of skin cancer. *CMAJ* 192: E1802-8, 2020.