A SURVEY OF UVA PROTECTION LEVELS OF SPF 50+ DERMOCOSMETIC FACE SUNSCREENS ON THE EUROPEAN MARKET: SAME LABEL, DIFFERENT LEVELS OF EFFICACY C. LE FLOC'H⁽¹⁾, M. JOSSO⁽²⁾, T. NAVARRO⁽²⁾, V. DELVIGNE⁽¹⁾, C. TRICAUD⁽²⁾

INTRODUCTION

It is well known that UVA and UVB wavelengths are responsible for the detrimental effects of solar radiation on skin. The need for well-balanced UVB/UVA photoprotection is widely accepted. Studies demonstrate that products with a SPF/UVAPF ratio of \leq 3 provide the most effective protection against pigmentation, DNA damage etc.^{*}. Based on these findings, in 2006 the European Commission published a recommendation stating, *inter alia*, that sunscreen products should provide a SPF/UVAPF ratio of ≤ 3 . This corresponds to a UVAPF of at least 20 for a SPF50+ sunscreen (measured SPF60 and above). No UVA claims should be made otherwise.

The purpose of this study was to evaluate the level of UVA protection provided by the sunscreens available on the European dermocosmetics market. The products tested are representative of commercially-available SPF50+ face sunscreens, based on 2017 IMS market data (value)*.

METHODS

The products were tested according to the Colipa in vitro UVA method 2011^{*}. Absorbance on PMMA plates was measured before and after exposure.

RESULTS

34 products were tested: 16 creams and gel-creams, 12 fluids, 3 gels and 3 sticks. The results ranged from UVAPF 49.7 to 3.0, with 24 values reaching at least UVAPF 20, the minimum value recommended by the European Commission for SPF50+ sunscreens. Six values were between UVAPF 10 and 20, and 4 values were below UVAPF 10.



CONCLUSION

This study shows that, 14 years after the publication of the European recommendation for sunscreen products, a majority of the SPF50+ face sunscreens on the dermocosmetics market provide the recommended UVA protection, and some exceed it substantially. However, there continue to be a number of products (1/3 of the products tested) on the market with a UVA protection level lower, and sometimes much lower, than the expected level.



*Moyal, 2012; *IMS Market; *Colipa UVA method 2011

⁽¹⁾La Roche-Posay Dermatological Laboratories, Levallois-Perret, France ⁽²⁾L'Oréal R&I, Chevilly-Larue, France