Photochemical & **Photobiological Sciences**



CORRECTION

View Article Online



Cite this: Photochem. Photobiol. Sci.. 2016, 15, 129

Correction: Patients with polymorphic light eruption have decreased serum levels of 25-hydroxyvitamin-D(3) that increase upon 311 nm UVB photohardening

Alexandra Gruber-Wackernagel, a Barbara Obermayer-Pietsch, b Scott N. Byrnec and Peter Wolf*a

DOI: 10.1039/c5pp90044a www.rsc.org/pps

Correction for 'Patients with polymorphic light eruption have decreased serum levels of 25-hydroxyvitamin-D(3) that increase upon 311 nm UVB photohardening by Peter Wolf et al., Photochem. Photobiol. Sci., 2012. 11, 1831-1836.

In our paper published in PPS we reported that patients with polymorphic light eruption (PLE) had low 25-hydroxy vitamin D (25(OH)D) serum levels (as measured through a standardized immunoassay) that increased upon 311 nm UVB photohardening. A re-examination of our laboratory data revealed that we had neglected in the analysis a pre-analytical dilution step and therefore the values that we reported were wrong. Unfortunately, we are unable to recalculate post hoc the exact 25(OH)D values because the dilution factor that had not been taken into account was variable. This was due to the fact that the entire blood sample was diluted with phosphate-buffered saline (PBS) before density gradient centrifugation to obtain peripheral mononuclear blood cells (PBMCs) for cell culture proliferation assays. Based on a reconstruction of this procedure with materials from a recent study (ClinicalTrial.gov no. NCT01595893) and doing a parallel determination of 25(OH)D levels in serum taken with regular serum tubes and in frozen diluted plasma from tubes that were used for PBMCs isolation (as in our previous study), we were able to calculate a dilution factor in the range of approximately 2 to 3. Taking into account the pre-analytic dilution step and dilution factor, it is most likely that in our previous study only a few to a maximum of a third of the patients (and not all patients as was wrongly reported) had 25(OH)D serum levels below 30 ng ml-1 in early spring and later in the season. This is in one way or another consistent with the results of the recent study from our laboratory (NCT01595893), in which 26 patients with PLE displayed a mean 25(OH)D serum level of 33.2 ng ml⁻¹ in the first 6 months of the year (from January to June) and only ten (38.5%) of them had an individual value below 30 ng ml⁻¹, as determined through fully automated, quantitative, chemiluminescent immunoassay (Schweintzger et al., unpublished data). We sincerely regret our error and apologize to patients and the scientific community.

References

1 A. Gruber-Wackernagel, B. Obermayer-Pietsch, S. N. Byrne and P. Wolf, Photochem. Photobiol. Sci., 2012, 11, 1831-1836.

aResearch Unit for Photodermatology, Department of Internal Medicine, Medical University of Graz, Graz, Austria. Tel: +43 316 385-12371; Fax: +43 316 385-12466; E-mail: peter.wolf@medunigraz.at

 $[^]b$ Division of Endocrinology and Metabolism, Department of Internal Medicine, Medical University of Graz, Graz, Austria

^cCellular Photoimmunology Group, Infectious Diseases and Immunology, Sydney Medical School, The Charles Perkins Centre Hub at The University of Sydney, Australia