Advances in Therapy

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PEER REVIEWED SUMMARY SLIDE

- In patients with atopic dermatitis (AD), a deficient conversion of linoleic acid to gamma-linolenic acid (GLA) has been observed. Evening primrose oil (EPO) is an herbal treatment for AD, providing patients with additional unsaturated fatty acids, including GLA.
- A prospective, open-label, single-arm, phase 4 study to investigate the mechanism of action of EPO in patients with AD in Switzerland was conducted.
- This study investigated whether EPO supplementation results in an increase of plasma GLA and its metabolite dihomo-gamma linolenic acid (DGLA) correlating with clinical improvement of AD, as assessed by the SCORing Atopic Dermatitis (SCORAD) index.
- A significant increase in plasma GLA and DGLA levels, and a decrease of the objective SCORAD was observed 4 and 12 weeks after initiation of EPO treatment. In the per-protocol population (n = 14), a significant inverse correlation between the changes in plasma GLA levels and SCORAD was found ($P = 0.008$).
- Clinical benefit of EPO treatment correlates with the increase of plasma GLA levels in AD patients. Increase of GLA might therefore serve as a biomarker for the treatment response.

This summary slide represents the opinions of the authors. Sponsorship and article processing charges for this study was funded by Max Zeller Söhne AG, Romanshorn, Switzerland. For a full list of acknowledgments and conflicts of interest for all authors of this article, please see the full text online.