A pilot study of an oral phosphodiesterase inhibitor (apremilast) for atopic dermatitis

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There are currently no FDA-approved systemic therapies for atopic dermatitis (AD) and current systemic immunosuppressants used in this population are limited by toxicities with long-term use. Monocyes from patients with atopic dermatitis (AD) display elevated cyclic AMP phosphodiesterase (PDE) activity leading to immune dysfunction. We aimed to gather preliminary safety and efficacy data of a novel oral PDE-4 inhibitor, apremilast, in a small cohort of adults with AD. We performed an open-label prospective trial of apremilast at 20 mg BD in 6 subjects (cohort 1) for 12 weeks and 30 mg BD in 10 subjects (cohort 2) for 24 weeks. The primary outcome was incidence of adverse events (AEs), with secondary outcomes focusing on disease severity measures and peripheral whole blood gene expression changes. Efficacy of apremilast was assessed at each study visit using the Eczema Area Severity Index (EASI), Dermatology Life Quality Index (DLQI), and the Visual Analog Scale (VAS) for pruritus. Nausea was the most common AE and appeared to be dose related (35% cohort 1, 90% cohort 2). In all subjects, the nausea was rated as mild and improved over the course of the study. Other AEs included headache, fatigue, loose stools, bloating, and vomiting, were rated as mild and improved.

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Results of patch test with hairdressing series in Korean patients with allergic contact dermatitis to para-phenylenediamine

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Background: Hair dye is one of the most common causes in allergic contact dermatitis (ACD), and its main allergen is para-phenylenediamine (PPDA). The patients with PPDA-induced contact dermatitis are often worried about the use of hairdressings and usually asked about any safe alternative hair dye without PPDA or hairdressing series with hairdressing. Apremilast demonstrated an acceptable tolerability profile in subjects with AD. Our preliminary data indicate that apremilast significantly improves inflammation, pruritus and quality of life in AD.

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