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Is there still a role for conventional topical atopic dermatitis treatments in the biologic era?

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Although atopic dermatitis (AD) is very common in children and adults and has a significant impact on patients' quality of life, there have been few therapeutic advances over past decades, with topical corticosteroids still being the standard anti-inflammatory therapy.¹ The recent U.S. Food and Drug Administration approvals of topical crisaborole for mild-to-moderate disease and injectable duplimumab for moderate-to-severe disease herald the beginning of a new era for the treatment of AD, with dozens of new compounds in the research and development pipeline.²

In this exciting new era, it is important not to lose sight of the tried and true while admiring the shiny and new. Tried and true interventions include topical moisturizers, topical corticosteroids and patient education.^{3,4} Certainly mild AD often responds adequately to this approach alone, as shown by the often substantial improvement in the vehicle or topical steroid-only arm of clinical trials.^{5–8} This improvement is likely due to a combination of the episodic nature of AD, the placebo effect, the effectiveness of regular moisturizer or topical corticosteroid use, and close follow-up among a group of motivated patients. With most new treatments, patient education about prognosis, management and dry skin care will continue to play an important adjunctive role.

In this issue of the *BJD*, Ahmed and colleagues critically appraise the recent publication by Paller *et al.* of two phase III studies of crisaborole, a new anti-inflammatory topical phosphodiesterase inhibitor for the treatment of mild-to-moderate AD.^{9,10} In these studies, significantly more patients achieved the primary endpoint of clear/almost clear skin with at least a 2-grade improvement in the Investigator's Static Global Assessment score after 28 days of treatment with crisaborole ointment compared with vehicle alone, but only about a third of patients met this endpoint (32.8% vs. 25.4%, $P=0.038$ and 31.4% vs. 18.0%, $P<0.001$). More recent data from a 48-week phase III safety study suggest a favourable side-effect profile,¹¹ and the medication is approved for patients aged 2 years and older. As Ahmed and colleagues discuss,⁹ there are a number of outstanding questions about

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Conflicts of interest

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crisaborole that need to be answered before it is widely used in clinical practice. Will it offer a therapeutic benefit over topical calcineurin inhibitors or corticosteroids and at what potency? Will it be cost-effective in comparison to standard topical therapy? Will there be subgroups more likely to respond to treatment, and will it have a role in conjunction with phototherapy or systemic therapies for patients with moderate-to-severe disease?

Critically Appraised Research Papers (CARPs) will have an increasing presence in the *BJD*, offering a forum for discussion of many of the considerations involved in designing and funding dermatology trials and observational studies. For example, in her reply, Dr Paller offers a discussion of the rationale for the choice of the primary outcome and some of the limitations imposed by regulatory agencies.¹² We hope that this feature of the journal will help to inform readers about highly relevant research published elsewhere, and provide a forum to place research findings of all types in a 'real-world' clinical context.

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