## RESEARCH LETTER

## Pharmacist recommendations regarding topical steroid use may contradict the standard of care in atopic dermatitis: An international, cross-sectional study



**Table I.** The number of lifetime atopic dermatitis training hours received by pharmacists

Country	Number of responses	Atopic dermatitis training hours, median (mean, range)
France	45	10 (15, 0-50)
Russia	42	30 (33, 1-100)
Australia	30	14 (21, 0-100)
Italy	9	30 (32, 0-57)
China	9	100 (93, 65-100)
Mexico	9	0 (3, 0-16)
Colombia	9	80 (66, 6-100)
Argentina	1	Not available
Total	154	

Overall median training was 20 hours. A total of 285 pharmacists were contacted from 8 countries, of which 153 responded—response rate: 53.7%.

advice from pharmacists on atopic dermatitis (AD) management, <sup>1</sup> pharmacists' engagement with AD care has been little studied. An Australian survey found that 36% of pharmacists underrecognized nonadherence as a reason for treatment failure, and 46% overestimated the topical steroid (TCS) skin atrophy risk.<sup>2</sup> Recent graduation and reliance on online sources both correlated with misinformation. A French survey similarly showed pharmacist mistrust in TCS, with 50% of pharmacists contra-

To the Editor: Although patients commonly seek

A French survey similarly showed pharmacist mistrust in TCS, with 50% of pharmacists contradicting doctors' instructions.<sup>3</sup> Despite this, pharmacists generally express confidence in giving dermatologic advice.<sup>4</sup> In order to clarify the role of pharmacists in the care of atopic patients, we carried out an international survey for a real-world evidence study in 8 countries.

Pharmacists in 4 continents answered an online survey about their knowledge of the disease, their experience concerning patient fears, and their advice for patients about AD care. Pharmacists were selected from a pool of contact persons of the Eczema Foundation and answered this survey voluntarily over a period of 6 months.

Of the 285 pharmacists contacted from 8 countries, 154 (53.7%) responded (Table I). Most questions asked by patients or their families concerned the following: treatment alternatives including probiotics (77.3%), moisturizers (69.5%), and topical steroids (64.9%). Fewer queries were related to pathogenesis (40.3%), diet (29.2%), and disease evolution (24.7%). Concerning treatment, the most frequent questions were related to TCS application (59.5%), TCS long-term side effects (55.6%), and TCS weaning (44.2%).

Pharmacists felt comfortable giving hygiene advice and explaining how to use moisturizers but felt less comfortable advising on TCS usage and its side effects. More than 80% of the pharmacists in the study considered themselves sufficiently informed about the disease. Nevertheless, 40.3% gave

information that contradicts current medical recommendations.

Approximately 58% of the pharmacists stated that TCS was a standard treatment for AD, but 40.3% recommended limiting the quantity and the frequency of TCS application, arguing that side effects were common, 29.9% recommended using gloves for TCS application, 21.4% recommended stopping treatment as soon as possible, 10.4% believed that TCS slowed growth, and 9.1% believed that TCS affected weight. The limited response numbers precluded analysis of the cofactors contributing to differences encountered between countries.

Pharmacists are at the forefront of answering questions from patients and families about treatment effects on themselves and their children. Most questions relate to the use of TCS. The observed contradiction between medical recommendations and pharmacists' responses may reinforce unfounded fears of TCS among patients. Such fears are common, affecting more than one in 2 patients. This can lead to low treatment compliance, which is the cause of most treatment failures.<sup>4</sup>

Notwithstanding the limitations of its sample size and the limited generalizability of its results to unrepresented countries, our study shows discrepancies between pharmacists' self-perceived and actual competencies in educating patients on AD management and optimizing compliance. Adherence is a major hurdle to overcome in managing AD; therefore, pharmacist training in AD management would be helpful. Training modules for pharmacists on the detection and management of

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TCS fear, using validated medical recommendations,<sup>5</sup> such as those developed by the Eczema Foundation, would improve practices.

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## Conflicts of interest

Dr Su has been an investigator, consultant, or advisor for AbbVie, Amgen, Astra-Zeneca, BMS, Ego, Eli Lilly, Janssen/JNJ, L'Oreal, Meda, Novartis, Pfizer, Pierre Fabre, and Sanofi. Dr Lio reports grants and personal fees from AOBiome, grants and personal fees from AbbVie, grants and personal fees from Regeneron/Sanofi Genzyme, personal fees from Pfizer, grants and personal fees from Pierre Fabre, personal fees from Eli Lilly, personal fees from LEO pharmaceuticals, personal fees from Galderma, personal fees from L'Oreal, personal fees from Dermavant, other from Micreos, personal fees from Johnson and Johnson, personal fees from Unilever, other from Theraplex, personal fees from IntraDerm, other from Altus Labs, outside the submitted work; in addition, Dr Lio has a patent Theraplex AIM pending and receives royalties. Drs Mushkin, Wollenberg, Svensson, Chernyshov, Murell Nosbaum, Faure, and Mery have no conflicts of interest to declare.

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