

Parental Preferences Regarding the Novel Systemic Treatment for Atopic Dermatitis in Children

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Introduction

Atopic dermatitis (AD) is a dermatosis that affects up to 20% of children and 3-7% of adults globally [1].

Over the past few years, several biologics and inhibitors of Janus kinases (JAKi) have been approved for the treatment of moderate to severe AD [2].

Very little study has been conducted on the tendencies of patients towards characteristics of novel therapies, with even fewer exploring the preferences of parents [2].

Case Presentation

A total of 221 participants were included in the study. They have the option to select from the alternatives provided in Table 1. The majority of respondents (80.09%) were aged between 21-40. The average age of the patient was 4.67 years.

The average Patient-Oriented Scoring of Atopic Dermatitis (PO-SCORAD) was 45.48288 ± 19.81465 .

Up to 73.76% of parents would choose medication taken every day in a tablet form over an every two weeks injection (26.24%). Parents who had used multiple AD treatments were more likely to accept an injection over a tablet, as were older parents ($P = 0.04255$), parents of older children ($P = 0.0109$), and parents of children with higher PO-SCORAD scores ($P = 0.00598$) (Figure 1. and Figure 2.).

Parents placed a higher value on the safety (81.45%) of the medication compared to its efficacy (18.55%). A trend was observed, especially among parents of children who took multiple treatments ($P = 0.111$). Older parents more frequently prioritized efficacy over safety ($P = 1.75E-04$). The prioritization of the drug effectiveness was positively correlated with the duration since the diagnosis ($P = 3.20E-04$).

Table 1. Possible responses that patients could have selected regarding their preferences for the novel, systemic treatment for atopic dermatitis (AD).

First option		Second option
Injection every 2 weeks	or	tablet everyday
Treatment more effective	or	treatment safer
Reduction of the dose on caregiver own	or	reduction of the dose by the caregiver
Withdrawal of the drug on caregiver own	or	withdrawal of the drug by the physician
Drug taken more frequently & effects lasting for shorter	or	drug taken less frequently and effects lasting for longer
Treatment on demand	or	maintenance treatment
Administration at home	or	administration in the medical facility
First effect-alleviation of pruritus	or	first effect-improvement of skin lesions
Lasting effect-alleviation of pruritus	or	lasting effect-improvement of skin lesions

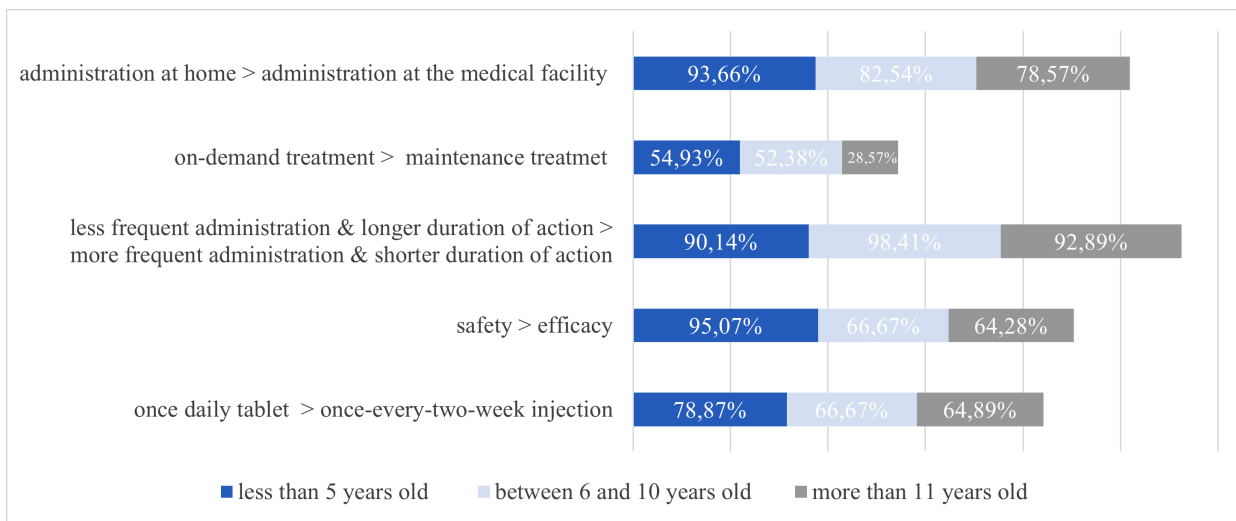


Figure 1. The presented graph depicts the variations in the likelihood of choosing generally preferred attributes (once-daily tablet, safety, less frequent administration, on-demand treatment, and administration at home) across parents of children from different age groups. Children were categorized into three distinct subgroups based on their age: those who were under the age of 5, those who were between the ages of 6 and 10, and those who were over the age of 11.

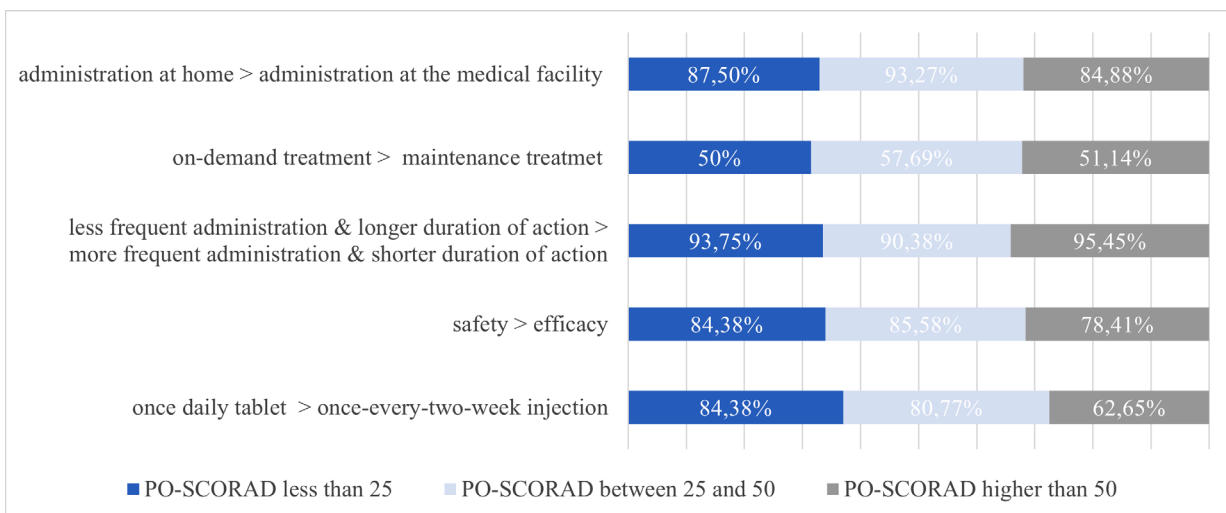


Figure 2. The presented graph depicts the variations in the likelihood of choosing generally preferred attributes (once-daily tablet, safety, less frequent administration, on-demand treatment, and administration at home) across parents of children with different disease severity. Children were divided into three subgroups depending on severity of atopic dermatitis (AD) assessed by Patient-Oriented SCORing Atopic Dermatitis (PO-SCORAD) (PO-SCORAD: less than 25- mild AD, between 25 and 50- moderate AD, more than 50-severe AD).

Individuals who had older children ($P = 0.03822$) and those who have attempted more treatment options in the past ($P = 0.01755$) were more likely to choose administration in a medical facility, even though administration at home was more popular overall.

The most important early effect of the medication was the alleviation of pruritus (73.3%), while the most desired long-term result was a decrease in the severity of the skin lesions (67.87%).

Conclusions

Previous research has indicated that adult patients generally prioritize efficacy, whereas parents tend to prioritize safety. It is in line with our study. Given the parents heightened concern for their children safety, it may be significant to engage in a dialogue, as failure to do so could result in poor compliance and adherence [3].

Parents are also unwilling to accept a medication in an injection form, as supported by our study [9]. It is a well-established fact that the experience of pain can be intensified by fear, therefore, prior to the implementation of an injection therapy, it may be beneficial to provide parents with the option of enrolling their children in a needle-based educational experience [4]. Many parents of children may experience “decisional conflict”, which is characterized by confusion regarding the optimal treatment option among competing alternatives [5].

The study revealed that parents of children with AD have a tendency to favor particular characteristics of novel

medications. Doctors should take parental concerns into account, especially when considering a new medication that may raise many parental concerns.

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