Data were collected from all subjects irrespective of treatment received (VP250 or placebo) or age ≥8 years of age using the FAQLQ-CF, a multidimensional self-report measure of health-related quality of life (HRQL) representing the construct under study.

Baseline FAQLQ-CF discrimination levels were very high (>1.7) for 12 items, high (1.35 < \( \beta < 1.69 \)) for 15 items, moderate (0.35–0.64) for 11 items, low (0.01–0.34) for 5 items, and very low (0) for 3 items. The most discriminatory items were Items 19 and 20 from the Emotional Impact factor, Items 1, 2, and 5 from the Risk of Accidental Exposure factor, and Item 22 from the Dietary Restriction factor. The corresponding question for Item 21 (‘Are you sensitive to peanut?’) was ‘Are you easily provoked when bumping into second-hand food?’ Item 17 (‘Risk of Accidental Exposure’; ‘Must washout when bumping into clothing fabrics’) and Item 21 (‘Emotional Impact’; ‘Have you stopped panicking when you don’t know how much peanut is in a food?’) were also very highly discriminative.

Between baseline and Month 12, 11 items (Items 2, 4, 5, 8, 9, 14, 17, 19, 20, 21, 22) had consistent discrimination levels, with Items 19, 20, and 21 very highly discriminatory in both stages (Table 2).

All items, except for moderate discrimination on Item 15 (Items 14, 16, 18, 20) had an increase in discrimination between baseline and Month 12.

All items had acceptable levels of difficulty on baseline and Month 12.

All the items presented an acceptable level of difficulty (means across \( \beta_{1-6} \leq -1.5 \)).

**FAQLQ-CF Data: Baseline Versus Month 12**

**Rationale**

1. Peanut allergy (PA) is a common and potentially life-threatening food allergy, the number of children affected by PA has increased significantly over recent decades.
2. A comprehensive assessment of health-related quality of life (HRQL) is a result of high levels of anxiety in social settings, reduced social integration, and stress related to uncontrolled environmental conditions.
3. Food allergy quality of life questionnaires (FAQLQ) are the most common instruments used in food allergy research to assess HRQL, but they are largely inferential, psychometric methods.

**Objectives**

1. To objectively evaluate which items of the FAQLQ-CF (Baseline-5F) were most informative using discrimination theory (IRT), which expresses the relationship between a response to a questionnaire item and the underlying construct of HRQL.
2. To document the psychometric properties of discrimination, measurement precision, less measurement error, and higher reliability of the scale.

**Methods**

**Study Design**

1. A retrospective analysis was conducted to evaluate food allergy HRQL, using data from the CHU Sainte-Justine, Montréal, Canada, Food Allergy Quality of Life Questionnaire (FAQLQ-CF) and baseline assessment.

2. The FAQLQ-CF was administered at baseline and Month 12 in children ages 3 to 18 years and aged ≥8 years using the FAQLQ-CF, a multidimensional self-report measure.

3. FAQLQ-CF norms of 668 children corresponding to 6 factors: Dietary Restriction, Allergen Avoidance, Risk of Accidental Exposure, Emotional Impact, and Item Information Curves were derived.

4. A total of 165 children completed the FAQLQ-CF at baseline; mean age (SD) was 9.33 (1.1) years.

**Results**

1. Item Information Curves showed that all items shared reasonable information with their factors, the functional discriminant factor suggests a reasonable spread of discrimination across its range (Figure 2).

2. Test Information Curves showed that all items shared reasonable information with their factors, the total information of each of the factors implies that the spread of discrimination is reasonable across different levels of the latent trait (Table 2).

3. All the items presented an acceptable level of difficulty (means across \( \beta_{1-6} \leq -1.5 \)).