

Online Supplement

Questionnaires

- *Asthma Control Diary (ACD)*. Daily scores range from 0-6 (higher is worse). A score of 0.0-0.75 is classified as well-controlled asthma; 0.75-1.5 as a 'grey zone'; and >1.5 as poorly controlled asthma. The ACD score is calculated as the average of 5, 6 or 7 items: all versions of the ACD include five symptom questions; ACD-6 includes reliever use; and in ACD-7, a score for pre-bronchodilator FEV1 is averaged with symptom and reliever items. The minimum clinically important difference is 0.5 [1].
- *Asthma Control Questionnaire (ACQ)*. This questionnaire is similar to the ACD but assesses a period of one week. Scores range from 0-6 (higher is worse). A score of 0.0-0.75 is classified as well-controlled asthma; 0.75-1.5 as a 'grey zone'; and >1.5 as poorly controlled asthma. The ACQ score is calculated as the average of 5, 6 or 7 items: all versions of the ACQ include five symptom questions; ACQ-6 includes reliever use; and in ACQ-7, a score for pre-bronchodilator FEV1 is averaged with symptom and reliever items. The minimum clinically important difference is 0.5 [2].
- *Mini Asthma Quality of Life Questionnaire (mini-AQLQ)*. This 15-item questionnaire is a short version of the complete 32-item questionnaire, but constitutes of the same 4 domains: symptoms, environment, emotions, activities, and covering a 2 week period. Scores range from 0-6 (lower is worse). The mini-AQLQ score is calculated as the average of domain items. The minimum clinically important difference is 0.5. This version has been developed to meet the needs of long-term monitoring, where efficiency may take precedent over precision of measurement [3].
- *After-Scenario Questionnaire*: The After-Scenario Questionnaire (ASQ) is a 3-item questionnaire that designed to assess participant satisfaction of the use of a specific device. The items address three important aspects of user satisfaction with device usability: ease of task completion, time to complete a task, and adequacy of support information (on-line help, messages, and documentation). The ASQ items use a 7-point Likert-scale from strongly agree (1) to strongly disagree (7), and a not applicable (N/A) point outside the scale [4].
- *GA²LEN Food Frequency Questionnaire (FFQ)*. Certain dietary factors such as high fat, sugar and salt intake are positively associated with asthma prevalence and current asthma. Conversely, diets high in fish, fruit and vegetables are negatively associated with current asthma. Therefore, participant's dietary habits, food intake and nutrient intake maybe an important consideration in predicting asthma control

and asthma exacerbations. Participants typical diet will be assessed at the introduction visit and at the end of the study using the GA²LEN FFQ [5]. This FFQ was designed to investigate the association between diet and asthma in adults across Europe. The FFQ is straightforward to use as it is concerned with whether people eat or not a specific food, and the frequency of consumption.

- *Health Education Impact Questionnaire (heiQ)*. This 40-item questionnaire includes the following domains: Health directed behaviour; Positive and active engagement in life; Emotional well-being; Self-monitoring and insight; Constructive attitudes and approaches; Skill and technique acquisition; Social integration and support; Health service navigation [6].
- *Hospital Anxiety and Depression Scale (HADS)*. This questionnaire was originally developed by Zigmond and Snaith (1983) and is commonly used to determine the levels of anxiety and depression that a patient is experiencing. The HADS is a fourteen item scale, seven of the items relate to anxiety and seven relate to depression. Each item on the questionnaire is scored from 0-3 and this means that a person can score between 0 and 21 for either anxiety or depression. The cut-off point for the presence of both anxiety and depression is set at 8/21 [7].
- *SNOT-22*. The Sino-Nasal Outcome Test is a patient-reported measure of symptom severity and health-related quality of life in sinonasal conditions. It covers a broad range of health and health-related issues, such as quality of life, physical problems and functional and emotional limitations. It contains 22 questions on rhinoconjunctival symptoms and for each question symptom severity is graded 0 to 5, with 0 indicating no problem and 5 indicating worst possible symptom. Scores are added to produce a total sum score ranging from 0 to 110 [8].

References

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