Uptake of HOME core outcomes; study of trial registries

Protocol v1.0

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Background

HOME is a global initiative of patients, healthcare professionals, journal editors, regulatory authorities and the pharmaceutical industry http://www.homeforeczema.org/index.aspx. The aim of HOME is to develop a consensus-based core outcome set (COS) and recommend instruments to measure the agreed domains for clinical trials and clinical practice. The core outcome set is the minimum that should be measured in all clinical trials.

The four core outcome domains that should be measured and reported in all eczema trials were agreed at the HOME II meeting, in Amsterdam in June 2011, published in July 2012 (1). The four core outcome domains are as follows:

- 1. Clinician-reported signs
- 2. Patient-reported symptoms
- 3. Quality of Life
- 4. Long-term control

The Eczema Area and Severity Index (EASI) is the core outcome instrument for measuring the clinical signs of eczema in all trials, agreed at a HOME consensus meeting in 2013 (2, 3). (EASI) is a validated scoring system that grades the physical signs of atopic dermatitis/eczema. The Patient Oriented Eczema Measure (POEM) is the core outcome instrument for measuring patient-reported symptoms of atopic eczema severity agreed in 2015 (4, 5). POEM focuses on the illness as experienced by the patient. The HOME group have not yet recommended instruments for measuring quality of life and long-term control (4, 6). The instruments and methods used to capture the core domains in published trials have been identified through systematic reviews conducted by the HOME group (7-10). This methodology of this study is based on a previous similar study conducted to assess the uptake of the core outcome set in rheumatoid arthritis (11).

Aim

The purpose of this study is to assess the uptake of the core outcome domains and instruments (POEM and EASI) in eczema treatment trials since publication of the COS. Details of each trial will be used to ascertain any differences in uptake e.g. between industry and academic trials, or in different areas of the world.

Methods

Clinical trial registries will be searched to identify trials of treatments for people with atopic dermatitis/ eczema.

Domain definitions

For this study, we will use the following definitions as adopted by HOME:

- Signs any clinical sign of eczema that is observed by the clinician
- Symptoms any clinical aspect of eczema that is observed by the patients / carer
- Quality of life any dermatology-specific health-related quality of life measurement
- Long-term control for trials of at least 3 months duration, signs, symptoms and quality of life measured at at least 3 times points. The HOME group have also determined that LTC should include a patient-reported "global" measure, but as yet this is undefined, so this is not included in the definition used here.

Identification of studies

The WHO International Clinical Trials Registry Platform (ICTRP) http://apps.who.int/trialsearch/ will be searched.

Search strategy:

- Search terms: 'eczema' OR 'atopic dermatitis' as the condition
- Recruitment status 'all'
- Phase 3 and 4 trials.

Screening

Trials will be screened for eligibility independently by two researchers and any discrepancies resolved by a third researcher.

Inclusion criteria:

- Clinical trials of treatments including adults and/or children with atopic dermatitis/eczema.
 Trials of treatments for the prevention of flares (secondary prevention trials) and trials where only a specific body area is assessed will be included.
- Registered between January 2005 and June 2018.

Exclusion criteria:

- Trials of only other types of eczema e.g. contact dermatitis and seborrheic dermatitis. However, if adults and/or children with atopic dermatitis/eczema are included in a mix of patients, these trials will be included.
- Trials looking at the primary prevention of eczema.
- Trials that were withdrawn.
- Trials only assessing safety.
- Trials only assessing biological/ cellular responses.

The WHO platform will be the primary source of information. Where there is a lack data available, the individual trial registries such as clinicaltrials.gov will be checked.

Data Extraction

The following data will be extracted for each trial (where stated):

- Trial details:
 - o Funder and sponsor type
 - o Location of trial single/ multi-centre, national/ international.
 - Age of participants (adults or children or both)
 - Duration of trial (treatment time and follow-up time where stated)
 - Planned sample size
- Trial registration:
 - Prospective or retrospective registration
 - Name of register
 - Date of registration
- Whether the trial was terminated early.
- Which of the core domains were measured (signs, symptoms, quality of life, and long-term control).
- Which outcome measurement instruments were included for measuring the core domains.
- Whether modified versions of the core instruments (EASI and/or POEM) were used.
- Any reference to the COS.

Data extraction will be conducted by one researcher and a second researcher will conduct a 20% check for accuracy. Further checks will take place if the data extraction is not deemed to be sufficiently accurate.

Analysis

- Data on the type of trial and participants, registration status, sample size, funder, duration will be presented.
- The total number and the proportion of trials that have included the core outcome **domains** (signs, symptoms, quality of life and long-term control).
- The total number and the proportion of trials that have included the core outcome instruments for signs and symptoms (POEM and/or EASI).
- The total number and the proportion of trials that have included other instruments to measure signs and symptoms.
- Which instruments have been used to measure domains of quality of life and long-term control.

We will also comment on whether the core instruments were included as a result of the COS (where stated). The data will be presented over time to determine any time trends.

Additional aspects of the project

Further studies are planned to compare planned outcome measures stated in trial registries with those reported in trial publications.

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