Clinical Study Summary

DEV/CCM/02495.2007

CT Registry ID#: NCT00520754
Study No.: A00315

These results are supplied for informational purposes only. Prescribing decisions should be made based on the approved package insert.

Based on Clinical Study Report document reference code: RRCE03C1301

Proprietary Drug Name
Xyzal® Drops

INN
Levocetirizine dihydrochloride

Therapeutic area and indication(s)
Recurrent cough associated with other allergic symptoms

Name of Sponsor/Company: UCB Pharma SA

Title of Study:
A non-controlled, pilot, multi-centric, open study of the efficacy and safety of levocetirizine dihydrochloride 5 mg/mL oral drops given 0.125 mg/kg b.i.d. during 90 days in the treatment of recurrent cough associated with other allergic symptoms, e.g. wheezing, in children aged 1-2 years.

Investigator(s) (number only): 2
Study Center(s) (number only): 2

Length of Study:
Date first patient enrolled: 08-Dec-2001
Date last patient completed: 24-Mar-2003
Phase of Development: Phase II (therapeutic exploratory)

Abstract:
The primary objective of the study was to document the efficacy of a 90 day-treatment with levocetirizine (LCTZ) 0.125 mg/kg b.i.d. in recurrent cough and possibly associated wheezing in children at high risk of developing chronic asthma. Subjects were male and female infants, aged 12 to 24 months, suffering from recurrent cough and other allergy related symptoms, e.g. wheezing. The efficacy was evaluated based on daily record cards (DRC) recordings of cough and wheezing. The secondary objectives were to describe the pharmacokinetic parameters after a single dose of LCTZ 0.125 mg/kg and to estimate the pharmacokinetic accumulation factor after repeated dosing. Pharmacodynamic parameters included wheal and flare inhibitions. Safety assessments included vital signs, physical examination, laboratory parameters, and adverse events (AEs). Descriptive statistics were performed on the clinical, pharmacokinetic, pharmacodynamic, and safety parameters.

Number of Subjects: LCTZ 0.125 mg/kg
Planned, N: 24
Enrolled, N: 15
Completed, n (%): 15 (100%)
Number of Subjects Withdrawn, n (%): 1 (6.7%)
Withdrawn due to Adverse Events, n (%): 1 (6.7%)
Withdrawn for Other Reasons, n (%): 0

Demography: LCTZ 0.125 mg/kg (N = 15)
Gender (Females/Males): 4/11
Age (months), mean (SD): 20.7 (3.7)
Race, n (%):
Caucasian 15 (100)
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Safety Outcomes:
- Summary of treatment emergent adverse events, deaths, other serious adverse events and certain other significant adverse events:

During the treatment period, 7 subjects (46.7%) experienced a treatment-emergent (TE)AE. The most frequently occurring AEs during the treatment period were infections and infestations, which were experienced by 40% of the subjects. Only 3 TEAEs were considered drug-related: pyrexia (1 subject) and blood alkaline phosphatase (ALP) increased (2 subjects). One case of blood ALP increased led to withdrawal of the subject. There were no deaths. One subjects experienced a serious(S) AE of hospitalization for pneumonia which was not considered drug-related and did not lead to discontinuation of the study drug. Clinically significant laboratory abnormalities were reported for 3 subjects, ALP increased (2 subjects), white blood cell increased, and lymphocyte count decreased (1 subject each). No clinically relevant changes in vital signs were noted.

<table>
<thead>
<tr>
<th>Treatment Emergent AEs</th>
<th>LCTZ 0.125 mg/kg (N = 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects with at least one TEAE, n (%):</td>
<td>7 (46.7)</td>
</tr>
<tr>
<td><strong>Subjects with TEAEs (by Primary System Organ Class)</strong></td>
<td>n (%) [n considered drug-related by the Investigator]</td>
</tr>
<tr>
<td>Eye disorders</td>
<td>2 (13.3) [0]</td>
</tr>
<tr>
<td>Gastrointestinal disorders</td>
<td>3 (20.0) [0]</td>
</tr>
<tr>
<td>General disorders and administration site conditions</td>
<td>1 (6.7) [1]</td>
</tr>
<tr>
<td>Infections and infestations</td>
<td>6 (40.0) [0]</td>
</tr>
<tr>
<td>Injury, poisoning and procedural complications</td>
<td>2 (13.3) [0]</td>
</tr>
<tr>
<td>Investigations</td>
<td>2 (13.3) [2]</td>
</tr>
<tr>
<td>Metabolism and nutrition disorders</td>
<td>1 (6.7) [0]</td>
</tr>
<tr>
<td>Nervous system disorders</td>
<td>1 (6.7) [0]</td>
</tr>
<tr>
<td>Respiratory, thoracic and mediastinal disorder</td>
<td>3 (20.0) [0]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Death, SAEs, and Other SAEs</th>
<th>LCTZ 0.125 mg/kg (N = 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death, n (%):</td>
<td>0</td>
</tr>
<tr>
<td>Subjects with SAEs, n (%):</td>
<td>1 (6.7) [0]</td>
</tr>
<tr>
<td><strong>Subjects with SAEs (by Primary System Organ Class)</strong></td>
<td>n (%) [n considered drug-related by the Investigator]</td>
</tr>
<tr>
<td>Infections and infestations</td>
<td>1 (6.7) [0]</td>
</tr>
</tbody>
</table>

Primary & Secondary Outcomes:
At week 1 the mean (SD) cough score at daytime was 0.9 (1.0), while at week 13 it was 0.3 (0.6). The mean (SD) cough score at nighttime was 0.8 (1.1) and 0.2 (0.4) at week 1 and 13, respectively. At week 1 the mean (SD) wheezing score at daytime was 0.2 (0.4), while at week 13 it was 0.2 (0.8). The mean (SD) wheezing score at nighttime for week 1 and 13 was 0.1 (1.3) and 0.1 (0.5), respectively.

The pharmacokinetic and pharmacodynamic results were consistent with those of a previous study (ETACTM study). The efficacy and safety of cetirizine 0.25 mg/kg in preventing the onset of asthma in children who suffer from atopic dermatitis was evaluated in the ETACTM study.

Publication Reference(s) based on the study:

Date of Report: 31-Jul-2007