The study listed may include approved and non-approved uses, formulations or treatment regimens. The results reported in any single study may not reflect the overall results obtained on studies of a product. Before prescribing any product mentioned in this Register, healthcare professionals should consult prescribing information for the product approved in their country.

<table>
<thead>
<tr>
<th>Study No.:</th>
<th>SALMP/AH93/J119</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
<td>A phase IV, multi-centre, double-blind, randomised, parallel group study in general practice to compare the efficacy and tolerability of inhaled salmeterol xinafoate 50 micrograms bd with placebo, both administered via the Diskhaler, in the treatment of episodic asthma induced by upper respiratory tract infection (URTI) in children.</td>
</tr>
<tr>
<td>Rationale:</td>
<td>The study was conducted in order to compare the efficacy and tolerability of inhaled salmeterol xinafoate (SAL) 50µg twice daily (BD) with placebo (PBO), both administered via the Diskhaler, in the treatment of episodic asthma induced by upper respiratory tract infection (URTI) in children.</td>
</tr>
<tr>
<td>Phase:</td>
<td>IV</td>
</tr>
<tr>
<td>Study Period:</td>
<td>January 1994 to May 1994</td>
</tr>
<tr>
<td>Study Design:</td>
<td>Multi-centre, double-blind, randomised, parallel group study</td>
</tr>
<tr>
<td>Centres:</td>
<td>26 centres in the United Kingdom</td>
</tr>
<tr>
<td>Indication:</td>
<td>Asthma</td>
</tr>
<tr>
<td>Treatment:</td>
<td>Subjects were randomised to receive either SAL 50µg BD or matching PBO. Relief medication provided was salbutamol 200µg as needed. All medications were administered via the Diskhaler.</td>
</tr>
<tr>
<td>Objectives:</td>
<td>The objectives of the study were to compare the efficacy and tolerability of inhaled SAL 50µg BD with PBO, both administered via the Diskhaler, in the treatment of episodic asthma induced by URTI in children.</td>
</tr>
<tr>
<td>Primary Outcome/Efficacy Variable:</td>
<td>The sum of symptom scores for each of day-time cough, day-time wheeze, night-time cough, and night-time wheeze.</td>
</tr>
<tr>
<td>Secondary Outcome/Efficacy Variable(s):</td>
<td>Overall symptom score (0 to 4 scale)</td>
</tr>
<tr>
<td></td>
<td>Individual symptom scores: day-time and night-time cough, day-time and night-time wheeze (0 to 3 scale)</td>
</tr>
<tr>
<td></td>
<td>Time to symptom relief</td>
</tr>
<tr>
<td></td>
<td>Use of relief medication</td>
</tr>
<tr>
<td></td>
<td>Mean symptom period morning and evening peak expiratory flow (PEF)</td>
</tr>
<tr>
<td></td>
<td>Physician and parent assessment of drug efficacy</td>
</tr>
<tr>
<td>Statistical Methods:</td>
<td>The efficacy population (EFF; all subjects who were randomised to treatment, experienced a confirmed URTI, and took at least 1 dose of study medication) was used for efficacy and safety analyses. Scores for each symptom were recorded on a numeric scale of 0 to 3, representing “none” (0), “mild” (1), “moderate” (2) and “severe” (3). The sum of the symptom scores therefore ranged from a minimum of 0 to a maximum of 12. Overall symptom scores were recorded on a numeric scale of 0 to 4. The sum of symptom scores was tabulated by day and summarised over the symptom period. The mean sum of symptom scores over the symptom period was compared between treatments using the Wilcoxon rank sum test. Time to symptom relief was modelled using Kaplan-Meier survival estimates. The individual symptom scores and the time to individual symptom relief were analysed analogously to the sum of symptom scores. Mean symptom period morning and evening PEF were compared using an analysis of covariance, with the mean of the baseline period daily mean morning and mean evening PEF recordings as covariates. The physician and parent assessments of drug efficacy were compared between treatment groups using a Wilcoxon rank sum test.</td>
</tr>
<tr>
<td>Study Population:</td>
<td>Children aged 4 to 10 years who had a history of episodic asthma and/or symptoms of wheeze and cough preceded by URTIs during the winter months.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Subjects:</th>
<th>SAL 50µg BD</th>
<th>PBO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned, N</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Randomised, N</td>
<td>126</td>
<td>115</td>
</tr>
<tr>
<td>Completed, n (%)</td>
<td>118 (94)</td>
<td>109 (95)</td>
</tr>
<tr>
<td>Total Number Subjects Withdrawn, N (%)</td>
<td>8 (6)</td>
<td>6 (5)</td>
</tr>
<tr>
<td>Withdrawn due to Adverse Events, n (%)</td>
<td>2 (2)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Withdrawn due to Lack of Efficacy, n (%)</td>
<td>1 (&lt;1)</td>
<td>1 (&lt;1)</td>
</tr>
<tr>
<td>Withdrawn for other reasons, n (%)</td>
<td>5 (4)</td>
<td>3 (3)</td>
</tr>
</tbody>
</table>

Demographics

<table>
<thead>
<tr>
<th>N (EFF)</th>
<th>SAL 50µg BD</th>
<th>PBO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females: Males</td>
<td>28:41</td>
<td>29:34</td>
</tr>
<tr>
<td><strong>Mean Age, years (range)</strong></td>
<td>7 (4-10)</td>
<td>7 (4-10)</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Race, n (%)</strong></td>
<td>Not Available (NA)</td>
<td>NA</td>
</tr>
</tbody>
</table>

### Primary Efficacy Results: EFF Population

#### Sum of symptom scores
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

#### Median of mean daily scores
- 3.5
- 3.1

#### p-value
- 0.46

### Secondary Outcome Variable(s):

#### Daily overall symptom score (EFF)
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

#### Median score
- 1.65
- 1.33

#### Individual symptom scores – day-time and night-time cough
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

#### Range of median scores
- 1.00-1.33

#### Individual symptom scores – day-time and night-time wheeze
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

#### Range of median scores
- 0.26-0.75

#### Time to symptom relief
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

#### Number of subjects with symptom relief, n (%)
- 58 (84)
- 56 (89)

#### Median days to relief
- 6
- 6

#### Probability of relief by Day 14 (95% CI)
- 0.87 (0.78, 0.96)
- 0.91 (0.83, 0.98)

#### Use of relief medication
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

#### Median blisters/day
- 1.78
- 1.50

#### Symptom period PEF
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

#### Physician and parent assessment of drug efficacy
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

### Safety Results:

#### Most Frequent Adverse Events (AEs) – On Therapy (EFF)
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

#### Subjects with any AE(s), n (%)
- 28 (41)
- 26 (41)

#### Headache
- 4 (6)
- 6 (10)

#### URTI
- 4 (6)
- 1 (2)

#### Tonsillitis
- 3 (4)
- 1 (2)

#### Vomiting
- 0
- 4 (6)

#### Nausea
- 0
- 3 (5)

### Serious Adverse Events (SAEs) – On Therapy (EFF)

#### n (%)

#### Non-fatal SAEs
- **SAL 50µg BD (N=69)**
- **PBO (N=63)**

#### Fatal SAEs
- 0
- 0

### Conclusion:
This study showed no statistical difference in the efficacy of SAL 50µg BD with PBO, both administered via the Diskhaler, in the treatment of episodic asthma induced by URTI in children. In the SAL 50µg BD treatment group, 28 (41%) subjects reported non-serious AEs with the most frequently reported being headache and URTI. In the PBO treatment group, 26 (41%) subjects reported non-serious AEs with the most frequently reported being headache and vomiting. No SAEs or fatalities were reported in either treatment group.

### Publications:
No Publications

Date Updated: 24-Mar-2006