

## **Clinical Study Summary**

DEV/CCM/02880.2007

### CT Registry ID#: NCT 00160589

Study No.: A00401

*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: RRCE05F2313

Proprietary Drug Name	INN	Therapeutic area and indication(s)	
Xyzal®Tablets	Levocetirizine	Allergic rhinitis	

Name of Sponsor/Company: UCB Pharma SA

**Title of Study:** A multicenter, double-blind, parallel, randomized, placebo-controlled study: evaluation of the efficacy and safety of levocetirizine 5 mg and desloratadine 5 mg administered orally as capsules once daily, in the morning, over 2 weeks in patients suffering from allergic rhinitis (AR).

Investigator(s) (number only)	): 70		
Study Center(s) (number only	<b>y):</b> 56		
Length of Study:		Phase of Development:	Phase IV
Date first patient enrolled:	21-Apr-2005	_	(therapeutic use)
Date last patient completed:	12-Sep-2005		

#### Abstract:

The primary objective of this study was to compare the clinical efficacy of levocetirizine (LCTZ) 5 mg and desloratadine (DESL) 5 mg as measured by the mean change from the baseline of Total 4 Symptom Score (T4SS) over 2 weeks of treatment (T4SS: sum of the individual symptom scores for sneezing, rhinorrhea, nasal pruritus, and ocular pruritus, evaluated on a 4-point scale retrospectively over the past 24 hours). Male or female subjects aged  $\geq 18$  years, with a 2-year clinical history of AR and a minimum mean T4SS of 6 over the 3- to 7-day baseline period were eligible. Safety was assessed by frequency, severity, nature and duration of adverse events (AEs), and by physical examination and vital signs. The primary hypothesis tested was that "the clinical efficacy of LCTZ 5 mg was superior to that of DESL 5 mg". This hypothesis was tested 2-tailed at the 5% level of significance. Change from the baseline in mean T4SS was analyzed using an analysis of covariance (ANCOVA) model including treatment as factor with 3 levels (1 for each treatment group), baseline score, and center. The treatment group difference was estimated by the difference in least square (LS) means, with the 95% confidence intervals (CI) for this difference. The test and p-value were based on estimated LS means through a contrast between the appropriate treatment groups. If the normality assumption underlying ANCOVA appeared to be violated, a non-parametric approach was used. Analysis was based on the intent-to-treat (ITT) population, i.e., all randomized subjects who took at least 1 dose of randomized study medication.

#### **Publication Reference(s) based on the study:** None

Number of Patients:	PBO	DESL 5 mg	LCTZ 5 mg
Planned, N:	81	324	324
Enrolled, N:	88	335	342
Completed, n (%):	71	316	318
Number of Patients Withdrawn, n (%):	17 (19.3%)	19 (5.7%)	24 (7.0%)
Withdrawn due to Adverse Events, n (%):	0	$3(0.9\%)^{a}$	4 (1.2%)
Withdrawn for Other Reasons, n (%):	17 (19.3%)	16 (4.8%) <sup>b</sup>	20 (5.8%)
<sup>a</sup> 1 AE occurred pre-treatment			
<sup>b</sup> Withdrew because of summer vacation			



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Demography:	PBO	DESL 5 mg	LCTZ 5 mg
	N=88	N=335	N=342
Gender (Males/Females):	35/53	146/189	153/189
Age (years), mean (SD):	33.6 (10.2)	34.3 (11.5)	34.6 (12.3)
Caucasian, n (%):	79 (89.8%)	315 (94.0%)	314 (91.8%)
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#### **Safety Outcomes:**

# - Summary of treatment emergent adverse events, deaths, other serious adverse events (SAEs) and certain other significant adverse events:

Safety data fully support the safety profile of LCTZ 5 mg and DESL 5 mg. There were no unexpected findings during the course of the study. Adverse events, which might be expected during treatment with an H1-receptor antagonist, were observed in both treatment groups. One subject in the LCTZ 5 mg group experienced tachycardia, which was considered serious, but was assessed by the Investigator as a moderate event not related to the study drug.

No relevant changes in vital signs and no relevant abnormalities in physical examination were observed.

Treatment Emergent AEs with an incidence	PBO	DESL 5 mg	LCTZ 5 mg
≥2% (ITT population)	N=88	N=335	N=342
Patients with at least one TEAE, n (%):	11 (12.5)	64 (19.1)	67 (19.6)
Patients with TEAEs	n (%) [n considered drug-related by the		
(by Primary System Organ Class)	Investigator]		
Gastrointestinal disorders	0 (0.0%) [0]	10 (3.0%) [4]	10 (2.9%) [2]
General disorders and administration site conditions	1 (1.1%) [0]	11 (3.3%) [9]	17 (5.0%) [9]
Infections and infestations	3 (3.4%) [0]	12 (3.6%) [1]	4 (1.2%) [1]
Nervous system disorders	6 (6.8%) [1]	32 (9.6%) [15]	34 (9.9%) [17]
Respiratory, thoracic and mediastinal disorders	1 (1.1%) [0]	6 (1.8%) [1]	8 (2.3%) [0]
Death, SAEs, and AEs that led to permanent	PBO	DESL 5 mg	LCTZ 5 mg
discontinuation	N=88	N=335	N=342
Death, n (%):	0	0	0
Patients with SAEs, n (%):	0	0	1 (<1%)
Patients with SAEs	n (%) [n considered drug-related by the		
(by Primary System Organ Class)	Investigator]		
Cardiac disorders	0	0	1 (<1%) [0]

#### **Primary and Secondary Outcomes:**

Compared to subjects treated with DESL 5 mg, subjects treated with LCTZ 5 mg experienced a higher reduction in T4SS over the first week of treatment and the entire treatment period. The difference between DESL 5 mg and LCTZ 5 mg treatment was 0.3 with a 95% confidence interval of [-0.06; 0.66]. However, the difference between the 2 treatment groups did not reach the statistical threshold of significance (p = 0.102). Compared to subjects treated with DESL 5 mg, subjects treated with LCTZ 5 mg experienced a significantly higher reduction in sneezing score over the first week of treatment and over the entire treatment period. A trend in favor of LCTZ 5 mg was observed when considering the rhinorrhea, nasal and ocular pruritus scores. No difference between DESL 5 mg, compared to Placebo, induced a significant decrease in T4SS, sneezing score, rhinorrhea score, and nasal and ocular pruritus scores over the first week of treatment and the entire treatment period. Neither, DESL 5 mg nor LCTZ 5 mg reduced nasal congestion *versus* placebo. T4SS data collected every hour during the 6 hours following the first drug intake showed that the action of LCTZ 5 mg was detectable at 4 hours, 5 hours and 6 hours (sustained statistically significant reduction *versus* placebo), and the action of DESL 5 mg was not detectable within the 6 hours following the first drug intake (no difference *versus* placebo).

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