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.

Study No: HH3104994

Title: A randomised, double blind, placebo controlled, two way crossover, three phase study to investigate the trial models; Vienna Challenge Chamber, in and out of season and Park study in season and the clinical efficacy of repeat doses of fluticasone propionate in subjects with seasonal allergic rhinitis (SAR).

Rationale: Traditional single nasal allergen challenges have several problems; a single high dose of allergen does not replicate the conditions found naturally. The Vienna Challenge Chamber (VCC) offers a controlled paradigm with which to evaluate reproducibility the effect of medication on allergic rhinitis. Although subjects participating in VCC trials report similar signs and symptoms, a straight comparison of the outcome of clinical trials generated by controlled allergen challenge in the VCC in and out of season with those occurring during a Park study has not been investigated. This study is designed to test the hypothesis that the VCC model delivers consistent results with the Park study.

Phase: II

Study Period: 15 Mar 2006 - 20 Nov 2006

Study Design: Randomised, double-blind, placebo controlled, two way, three phase study

Centres: One centre in Austria

Indication: Allergic Rhinitis

Treatments:

Subjects were randomised to either 200 µg fluticasone propionate or matching placebo dosed as 2, 100ul (50 µg) actuations twice daily for 7 days in the "Ch amber" or 14 days in the "P ark."

- Phase 1 fluticasone propionate and placebo in a 2 part crossover in the VCC "ou t of season."
- Phase 2 fluticasone propionate and placebo in a 2 part crossover in the Park "In s eason."
- Phase 3 fluticasone propionate and placebo in a 2 part crossover in the Chamber "In se ason."

Objectives:

Primary

- To investigate the consistency of the results obtained from the VCC and the Park study trial models using repeat intranasal doses of fluticasone propionate vs placebo on allergic symptoms of SAR provoked by spending 5 hours in the VCC in and out of season versus 5 hours in the Park study in season.

Secondary

- To investigate the clinical efficacy of repeat intranasal doses of fluticasone propionate vs placebo on subjective nasal, eye and global symptoms, and objective nasal flow and nasal secretions in provoked allergic rhinitis, spending 5 hours in the VCC in and out of season vs 5 hours in the Park study in season.
- To investigate the safety and tolerability of repeat doses of fluticasone propionate.
- To investigate the effect of fluticasone propionate treatment on quality of life (QOL) in subjects with SAR.

Statistical Methods:

No formal statistical analysis was performed on the safety data sets.

Sample size considerations. Using the within-subject estimate, it was calculated that to detect a difference of 1.5 in the weighted mean major symptom score with 90% power and significance of 5%, a sample size of 24 evaluable patients would be required. 40 subjects were randomised into the study in order to obtain at least 24 evaluable subjects.

Efficacy data has yet to be analysed by the investigator and is intended to be published in a peer reviewed journal. In the analysis there will be no formal comparison between the two study types (VCC and Park), the aim is to show consistency between results of the two studies (VCC out of

season and Park). A comparison will also be made between VCC in season and Park once again with no formal hypothesis being tested. However, it is planned to perform a comparison between VCC in and out of season, by comparing the effect size within each study.
Significance would be demonstrated if the two sided 95% confidence interval for the difference between the treatment effect size does not contain zero.

Study Population: Male and female subjects were recruited with allergic rhinitis.

Number of Subjects:	**Phase 1 FP + Placebo VCC out of season**	**Phase 2 FP + Placebo Park in season**	**Phase 3 FP + Placebo VCC in season**
Planned N	40	40	40
Dosed N	40	40	40
Completed n (%)	40(100)	40(100)	40(100)
Total Number Subjects Withdrawn N (%)	0	0	0
Withdrawn due to Adverse Events n (%)	0	0	0
Withdrawn due to Lack of Efficacy n (%)	0	0	0
Withdrawn for Other Reasons n (%)	0	0	0
Demographics at screening			
N (safety population)		40	
Females: Males		15:25	
Mean Age in Years (sd)		27.6(5.8)	
Mean Weight in Kg (sd)		69.0(11.3)	
White n (%)		40(100)	

Safety results: Time period for collection of adverse events (AEs) and serious adverse events was from the day of Screening until the Follow-up visit.

Adverse Events:	**Phase 1**		**Phase 2**		**Phase 3**	
	FP	**Placebo**	**FP**	**Placebo**	**FP**	**Placebo**
N (safety population)	40	40	40	40	40	40
No. subjects with AEs n (%)	2(5)	0	3(8)	1(3)	1(3)	1(3)
Most Frequent AEs n (%)						
Headache	2(5)		2(5)	1(3)		
Common cold				1(3)		
Cough			1(3)			
Conjunctivitis					1(3)	
Bronchospasm						1(3)
Intestinal infection			1(3)			

Serious Adverse Events, n (%) [n considered by the investigator to be related, possibly related, or probably related to study medication]: There were no serious adverse events reported in this study.

Publications: None.