Hypothesis / aims of study
SVT-40776 is a new potent M₃ receptor antagonist under development for the treatment of overactive bladder (OAB) with high bladder/salivary gland selectivity (1). Previous studies have shown that SVT has a rapid onset of absorption, with Cmax being reached between 5 and 8 h after dosing. Tₘₐₓ was not affected by multiple dosing (2, 3). A clinical trial was performed to evaluate the pk, tolerability and preliminary efficacy of SVT in healthy postmenopausal females.

Study design, materials and methods
Twelve subjects from 50 to 70 years old were randomized to receive SVT 0.125 mg, 0.4 mg or PLB o.d. for 17 days. Subjects filled a diary to record time and volume of each void. A descriptive analysis was performed.

Results
SVT 0.4 mg showed the largest mean volumes per void (550-650 mL) from Day 2 until the end of the study when compared to the other groups (Figure 1). From Day 10 until 17, when the steady state is achieved, the 0.125 mg dose group showed a higher volume per void compared to the PLB group (range: 450-550 mL). The differences in the mean volumes per void between treatment groups disappeared slowly after Day 18. From Day 0 to 17 a slight decrease in the number of voids per day was recorded for the two active dose groups; from 7.6 to 6.8 times per day in the 0.125 mg group and from 8 to 6.4 times per day in the 0.4 mg group. The mean total number of voids per day with active treatment remained fairly stable and ranged from 5.6 to 7.8. The PLB group showed a slight increase in number of voids per day; from 7.5 on Day 0 to 8.5 on Day 17 and showed a higher variation (5.5 to 10).

Interpretation of results
A dose-relationship was observed for the effect of SVT on the volume of urine per void. After 8 days of treatment, the 0.125 mg dose (the closest to the expected therapeutic range of doses) showed larger volumes of urine per void than PLB. The 0.4 mg dose group showed the largest volumes per void compared to the 0.125 mg dose and PLB groups. A slight decrease in number of voids per day from Day 0 to Day 17 was observed with both SVT dose groups.

Concluding message
These results are the first indication on the possible efficacy of SVT-40776 in OAB and support continuation of the clinical development of this compound.

References
1.- Abstract #298. 35th ICS annual meeting (Sep-05)
2.- Abstract #112. 35th ICS annual meeting (Sep-05)
3.- Abstract #270. 34th ICS annual meeting (Aug-04)
FUNDING: Laboratorios Salvat
CLINICAL TRIAL REGISTRATION: This clinical trial has not yet been registered in a public clinical trials registry.
HUMAN SUBJECTS: This study was approved by the Stichting Therapeutische Evaluatie Geneesmiddelen and followed the Declaration of Helsinki. Informed consent was obtained from the patients.