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**Title:** DARIFENACIN, THE FIRST SELECTIVE M<sub>3</sub> ANTAGONIST FOR OVERACTIVE BLADDER: COMPARISON WITH OXYBUTYNYN ON AMBULATORY URODYNAMIC MONITORING AND SALIVARY FLOW

### **Aims of Study:**

Preliminary data suggest that the selective M<sub>3</sub> antagonist darifenacin may have selectivity for bladder over salivary gland, leading to a lesser effect on salivary flow. This study compared the effects of darifenacin with the non-selective agent, oxybutynin in patients with detrusor instability.

### **Methods:**

This was a randomized, double-blind, parallel-group, two-way crossover study. Ambulatory urodynamic monitoring (AUM; duration of detrusor overactivity in secs, measured for 6 h) and stimulated salivary flow measurements over 1 min (area under effect-time curve [AUEC] 2 h pre-dose to 4 h post-dose) were performed on Day 7 of treatment. Urodynamic variables and salivary flow measurements were analysed by ANOVA.

### **Results:**

There was no statistically significant difference in duration of detrusor overactivity with darifenacin (15 or 30 mg od) compared with oxybutynin (5 mg tid). Salivary flow (AUEC) was statistically significantly greater in patients who had received darifenacin compared with those who had received oxybutynin (table).

Treatment (mg)	Darifenacin 15 od	Oxybutynin 5 tid	Darifenacin 30 od	Oxybutynin 5 tid
<b>Salivary Flow</b>	n=21	n=22	n=22	n=23
<b>AUEC (ml)</b>	725*	383	419**	271
<b>AUM</b>	n=20	n=23	n=21	n=21
<b>Duration of Overactivity on Day 7 (secs)</b>	308	243	227	279

P-value \*p=0.0002 and \*\*p=0.0499.

### **Conclusions:**

At doses with similar urodynamic efficacy, oxybutynin reduced salivary flow significantly more than darifenacin. This may indicate that darifenacin has comparable urodynamic efficacy to oxybutynin, but less of an adverse effect on salivary flow. This study was sponsored by Pfizer, Inc.