## RESEARCH HIGHLIGHTS

## Solifenacin causes less dry mouth than oxybutynin in OAB

Patients with chronic overactive bladder (OAB) are usually treated long-term with antimuscarinic agents. However, adherence to treatment is poor-rates as low as 20% at 1 year have been reported in some studies. A frequent reason for discontinuation of therapy is dry mouth, which is reported by as many as 80% of patients receiving the immediaterelease formulation of oxybutynin (widely considered the first-line agent for OAB). Studies of solifenacin, another antimuscarinic agent, have indicated a lower risk of dry mouth compared with oxybutynin, which might lead to improved patient adherence. The results of the VECTOR study, a Canadian multicenter trial that compared the safety and tolerability of these two antimuscarinic agents (with particular attention to dry mouth), have now been published in The Journal of Urology.

The double-blind, double-dummy study included 132 patients with OAB (defined as >1 urgency episode and  $\geq 8$  micturitions per 24 h) who were randomly assigned to receive either solifenacin (5 mg once daily; n = 68) or oxybutynin (5 mg three times daily; n = 64) for 8 weeks. The primary outcome measure was the patient-reported incidence and severity of dry mouth. Efficacy was also evaluated using 3-day voiding diaries, the Patient Perception of Bladder Condition scale and Overactive Bladder Questionnaire scores; however, the study was not sufficiently powered to allow definitive conclusions to be reached regarding treatment-related differences in diary variables.

Significantly fewer patients in the solifenacin group reported dry mouth compared to the oxybutynin group (35% versus 83%, P <0.0001). In addition, dry mouth was significantly milder in patients receiving solifenacin. Excluding dry mouth, fewer patients in the solifenacin group experienced one or more adverse effects (including nasal dryness, dizziness, fatigue and constipation) compared with the oxybutynin group (59% versus 70%). Efficacy measures improved in



both groups, but were not significantly different at the end of the study.

The authors conclude that solifenacin has a better tolerability profile than oxybutynin at the dosages used in the VECTOR study. However, as these were only the recommended starting doses and no dose escalation was permitted, this may not fully reflect clinical practice. Also, as the patients knew the study was primarily focused on the incidence of dry mouth, reporting levels might have been increased compared to a passive reporting approach.

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Original article Herschorn, S. et al. Tolerability of 5 mg solifenacin once daily versus 5 mg oxybutynin immediate release 3 times daily: results of the VECTOR trial. J. Urol. 183, 1892–1898 (2010)