348

Cardozo L[1], Ryan J[2], Hall T[3], Ebel Bitoun C[4], Kausar I[5], Darekar A[6], Wagg A[7], Whelan L[6], Khullar V[8]
1. *King's College Hospital,* ***2.*** *The Alverton Practice,* ***3.*** *Knowle House Surgery,* ***4.*** *Pfizer France,* ***5.*** *Pfizer Inc,* ***6.*** *Pfizer Ltd,* ***7.*** *University of Alberta,* ***8.*** *St Mary's Hospital*

EFFECTS OF DRUG CESSATION IN SUBJECTS RECEIVING FESOTERODINE FOR TREATMENT OF OVERACTIVE BLADDER SYMPTOMS

Hypothesis / aims of study
Subjects in an open-label, flexible-dose fesoterodine trial demonstrated clinically-relevant improvements in micturition frequency and urgency episodes and a reduction in incontinence pad use after 12 weeks of treatment. We assessed the effects of drug cessation on bladder diary variables, health-related quality of life (HRQL), and severity of bladder-related problems 4 weeks after the end of this 12-week trial.
Study design, materials and methods
This was an open-label trial conducted at 39 sites across the UK. Eligible subjects were men and women aged ≥18 years who self-reported OAB symptoms for ≥3 months before screening, had a mean of ≥8 micturitions/24 h and ≥3 urgency episodes/24 h on 3-day bladder diaries, and who reported at least "moderate" bladder-related problems on the Patient Perception of Bladder Condition (PPBC) at baseline. All subjects started treatment on fesoterodine 4 mg once daily. After 4 weeks, subjects could opt to escalate to fesoterodine 8 mg or remain on the 4-mg dose for the remaining 8 weeks of treatment based upon discussion of treatment efficacy and tolerability with the investigator. Subjects returned for a follow-up visit at week 16, 4 weeks after the end of treatment. Subjects completed 3-day bladder diaries and the PPBC at baseline and weeks 4, 12, and 16; subjects also completed the King's Health Questionnaire (KHQ) at baseline and weeks 12 and 16. Efficacy endpoints were assessed descriptively using the Full Analysis Set, which included subjects receiving ≥1 dose of study medication and providing baseline and post-baseline data for ≥1 efficacy endpoint during the study. Missing values at week 12 were imputed using the Last Observation Carried Forward (LOCF) method.
Results
After 12 weeks of treatment with fesoterodine, subjects demonstrated clinically meaningful improvements in diary variables and KHQ domains; 78.9% (254/322) of subjects reported improvement on the PPBC (**Figure 1**). The previously observed improvements in all diary variables (**Figure 2**) and KHQ domains at week 12 (**Figure 3**) deteriorated by week 16, 4 weeks after cessation of fesoterodine treatment; 61.3% (160/261) of subjects reported deterioration on the PPBC at week 16.

Figure 1

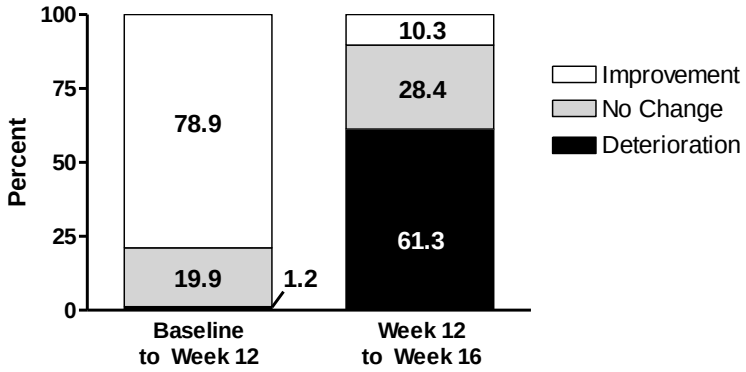
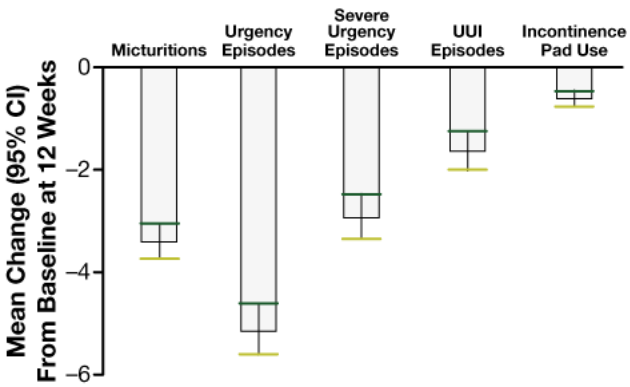


Figure 2



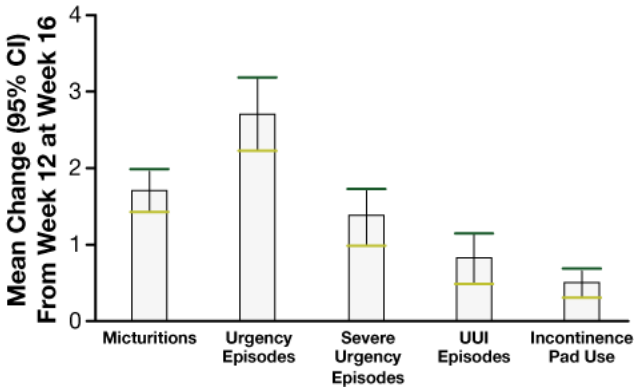
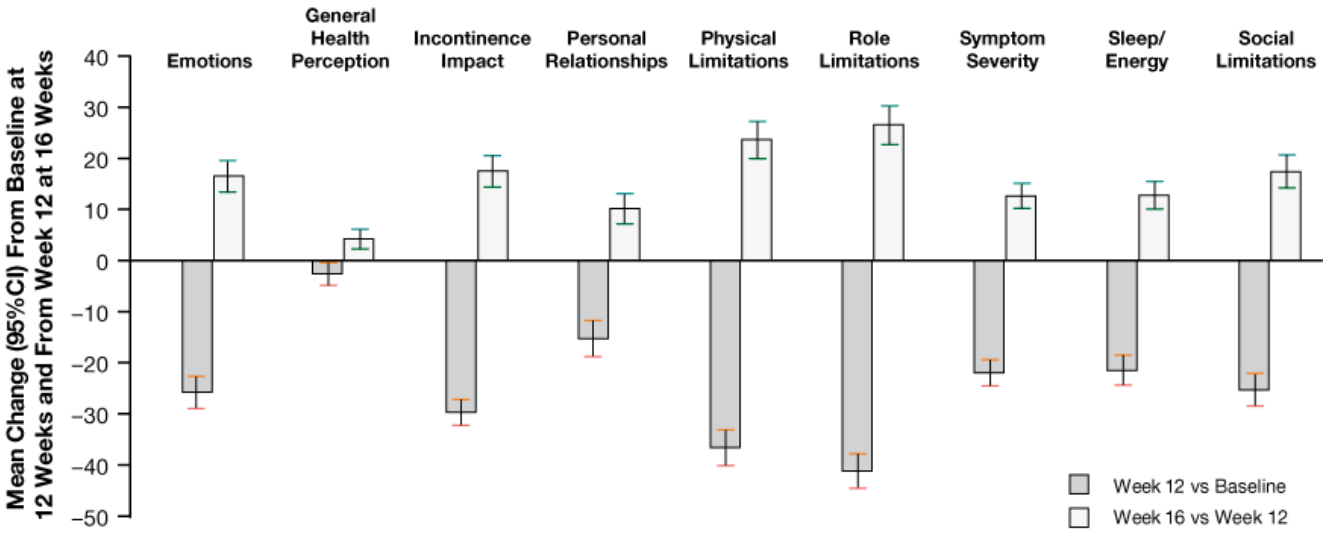


Figure 3



Interpretation of results

Four weeks after discontinuation of fesoterodine, subjects showed an increase in frequency of OAB symptoms, an increase in severity of bladder-related problems, and a reduction in HRQL. Deteriorations between weeks 12 and 16 appeared relatively greater for patient-reported outcomes than for diary variables. At week 16, 4 weeks after cessation of fesoterodine, improvements in diary variables at week 12 deteriorated levels similar to those observed at week 4 (data not shown).

Concluding message

Improvements in diary variables, severity of bladder-related problems, and HRQL deteriorated within four weeks of cessation of fesoterodine treatment.

Specify source of funding or grant	**Funded by Pfizer Inc**
Is this a clinical trial?	**Yes**
Is this study registered in a public clinical trials registry?	**Yes**
Specify Name of Public Registry, Registration Number	**ClinicalTrials.gov ID NCT00806494**
Is this a Randomised Controlled Trial (RCT)?	**Yes**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**Yes**
Specify Name of Ethics Committee	**Multi-centre Research Ethics Committee for Wales**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**