Improvement in symptoms following 6 week alpha-blocker use and predictors of improvement:
A single-arm open-label cohort study in clinical practice

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INTRODUCTION
Current guideline recommendations for LUTS are based on the efficacy of alpha-blockers assessed by symptom scores. Clinicians should also know how many patients will benefit from alpha-blocker therapy and should also be able to identify who will benefit.

AIM
We studied the changes in patient symptoms following alpha-blocker therapy and the predictors of symptom improvement in clinical practice.

METHODS
Design: single-arm, open-label observational cohort study with a 6-week follow-up.

Setting: 22 pharmacies in the Netherlands.

Participants: patients with new prescription for an alpha-blocker from a general practitioner or urologist for LUTS.

Outcomes: IPSS, OAB-q SF, PGI-I

Predictors: Demographic, disease-related, and drug-related information.

Statistical analyses: Missing data were imputed. Logistic and linear regression analyses were performed.

RESULTS
248 patients were included of which 119 had complete data.

37% of patients perceived clear symptomatic improvement after six weeks based on PGI-I score.

Improvement was more likely in those who still used alpha-blockers at the end of the 6-week study period and in those who used multiple medications.

IPSS and OAB-q SF scores decreased significantly.

The only predictor of change was the pretreatment symptom severity.

Analyses on original and imputed datasets yielded comparable results.

CONCLUSION
Approximately one-third of our cohort perceived symptom improvement on alpha-blocker therapy. However, we identified no clear predictors of who might benefit from alpha-blocker treatment, indicating that alpha-blockers should still be prescribed on a trial basis.

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