Effect of dutasteride, tamsulosin and the combination on patient-reported quality of life and treatment satisfaction in men with moderate-to-severe benign prostatic hyperplasia: 2-year data from the CombAT trial

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OBJECTIVE

To investigate the effect of dutasteride and tamsulosin as combined therapy compared with each monotherapy for improving patient-reported health outcomes in men with moderate-to-severe urinary symptoms and prostate enlargement, reporting the pre-planned 2-year analyses from the CombAT trial.

PATIENTS AND METHODS

The CombAT study is an ongoing, international, double-blind, randomized, parallel-group trial. Men aged ≥50 years with a clinical diagnosis of benign prostatic hyperplasia (BPH), an International Prostate Symptom Score (IPSS) of ≥12 units, a prostate volume of ≥30 mL, a total serum prostate-specific antigen level of 1.5–10 ng/mL and a peak urinary flow of >5 and ≤15 mL/s, with a minimum voided volume of ≥125 mL, were randomized to receive 0.5 mg dutasteride, 0.4 mg tamsulosin or the combination once daily for 4 years. Symptoms were assessed every 3 months. The primary endpoint at 2 years was the change in IPSS from baseline. Secondary endpoints included various measures of health outcomes, which included the BPH Impact Index (BII), IPSS Question 8 (Q8), and the Patient Perception of Study Medication (PPSM) questionnaire.

RESULTS

Combined therapy resulted in significantly greater improvements in BII and IPSS Q8 from baseline than did dutasteride from 3 months and compared with tamsulosin from 9 months (BII) or 12 months (IPSS Q8). Assessments using the PPSM questionnaire showed that a significantly higher proportion of patients were satisfied with and would request dutasteride and tamsulosin combined therapy than with each monotherapy at 24 months.

CONCLUSIONS

Dutasteride and tamsulosin combined therapy provides significantly greater improvements in patient-reported quality of life and treatment satisfaction than both monotherapies at 2 years, following the trends for clinical improvements in symptom scores and peak urinary flow rates, in men with moderate-to-severe BPH symptoms.

KEYWORDS

BPH, impact index, combined therapy, dutasteride, tamsulosin

INTRODUCTION

BPH has a significant negative impact on the quality of life (QoL) of affected patients [1]. Indeed, symptom bother and interference with normal daily activities, reduction in the quality of sleep, increased worry over health, and the detrimental effects on sexual relationships are the primary drivers for patients with symptomatic BPH seeking healthcare [2–4].

BPH can be a progressive condition, particularly when associated with increased prostate volume and elevated serum PSA levels at the initial assessment [5,6]. As the disorder advances, it can lead to a worsening of symptoms and an increased risk of serious outcomes, such as acute urinary retention (AUR) and disease-related surgery [7]. Recent surveys have highlighted that preventing disease progression is a key priority among men with BPH [8,9], and therefore the main goals for BPH treatment include not only improvement in symptom scores and objective measures, but also relieving the risk of progression and improving patient-reported QoL and treatment satisfaction. There is increasing recognition of the

importance of considering patient perceptions and preferences during clinical decision-making [10–12], and patient satisfaction with treatment will have important implications for compliance and overall treatment success.

The two principal drug classes in BPH treatment, α-blockers and 5α-reductase inhibitors (5ARIs), have both been shown to improve symptoms and QoL [13–16]. The Medical Therapy of Prostatic Symptoms (MTOPS) study showed that combined therapy with the type 2-selective 5ARI finasteride and the α-blocker doxazosin was more effective than either drug alone in reducing the risk of BPH progression and improving symptoms at 4 years in men with mild-to-severe BPH, reflecting the general population [17]. However, neither disease-specific QoL nor any other patient-reported outcomes were assessed in this study in any detail; indeed, data on the effects of α-blocker and 5ARI combined therapy on disease-specific, patient-reported health outcomes are limited to short-term studies. In the 1-year Veterans Affairs study, the improvement in the BPH Impact Index (BII) score and the proportion of men reporting improvement in overall assessments were significantly greater with the finasteride and terazosin combination than with finasteride alone, but not compared with terazosin monotherapy [18].

The ongoing Combination of Avodart® and Tamsulosin (CombAT) study is investigating the effect of the dual 5ARI dutasteride and the α-blocker tamsulosin, alone and combined, on symptoms and health outcomes over 2 years, and on the risk of AUR and surgery over 4 years, in men with moderate-to-severe urinary symptoms and prostate enlargement [19]. Several tools were used to assess patient-reported health outcomes. The BII and question 8 of the IPSS are the two most commonly used and validated QoL instruments in BPH studies [10]. The third instrument used was the Patient Perception of Study Medication (PPSM) questionnaire, which was specifically developed for use and validation in this trial to assess patient treatment satisfaction across a range of domains. These included control of urinary problems, strength of urinary stream, pain of urination, effect on usual activities and overall satisfaction. Results from the CombAT pre-planned 2-year analysis were reported recently, and these showed significantly greater improvements in symptoms with

dutasteride and tamsulosin combined therapy from 3 months vs dutasteride, and from 9 months vs tamsulosin [20]. Combined therapy also provided significantly greater improvements in peak urinary flow rate (Q_{max}) than with each monotherapy from the first assessment after baseline at 6 months to 24 months.

Here we report the effects of dutasteride and tamsulosin, alone and combined, on patient-reported QoL, as measured with the BII, IPSS Q8 and PPSM, over the first 2 years of the CombAT trial.

PATIENTS AND METHODS

CombAT is an ongoing, 4-year, international, double-blind, randomized, parallel-group study. The design and the primary efficacy and safety results from the pre-planned 2-year analysis were reported previously [19,20]. Briefly, eligible men were aged $\geq$50 years with clinically diagnosed BPH, an IPSS of $\geq$12 units, prostate volume (assessed by TRUS) of $\geq$30 mL, a total serum PSA level of 1.5–10.0 ng/mL, a Q_{max} of >5 and $\leq$15 mL/s and a minimum voided volume of $\geq$125 mL. Following screening and a 4-week, single-blind placebo run-in period, patients (4844) were randomized in a 1:1:1 ratio to receive dutasteride (0.5 mg/day) and tamsulosin (0.4 mg/day), dutasteride (0.5 mg/day) and tamsulosin-matched placebo, or tamsulosin (0.4 mg/day) and dutasteride-matched placebo, for 4 years. In the pre-planned 2-year analysis, the primary endpoint was the mean change in IPSS from baseline. Secondary endpoints, assessed according to a pre-designed hierarchy, included Q_{max}, prostate volume and various measures of health outcomes. The time to event and the proportion of subjects with AUR and BPH-related surgery will be assessed at 4 years.

The BII (Appendix) is a four-item questionnaire that measures the impact of symptoms on physical discomfort, worry about health, degree of bother and limitations of daily activities. The first three questions are scored 0–3 and the fourth 0–4, giving a total score of 0 (no impact) to 13 (highest negative impact). The BII has acceptable test-retest and internal consistency reliability, construct and discriminant validity and responsiveness [21]. The BII was assessed at baseline and then at every 3-month visit.

Responses to IPSS Q8, 'If you were to spend the rest of your life with your urinary condition just the way it is now, how would you feel about that?' were assessed at baseline and then at every 3-month visit. Scores range from 0 (delighted) to 6 (terrible). The validity of the IPSS is widely accepted [22].

The PPSM (Appendix) is a 12-item questionnaire that assesses patient satisfaction with treatment. The US English version of the PPSM has now undergone initial validity analyses, and the results strongly support the reliability, validity and responsiveness of this novel instrument, and therefore its use in assessing treatment satisfaction in men with BPH [23]. For questions 1–11, patients respond on a 7-item scale (from 'much improved' to 'much worse', or 'very satisfied' to 'very dissatisfied'). For question 12, which asks 'Would you ask your doctor for the medication you received in this study?', the possible responses are yes, no and not sure. Responses to the PPSM questionnaire were assessed at baseline (after completing the placebo run-in period) and then at every 3-month visit during treatment, and we report responses to individual questions, as well as the PPSM total score.

The PPSM total score analysed the summed responses to questions 1–4 and 9–11, excluding questions 5–8, which relate to pain. Due to the low prevalence of pain in BPH patients in general, and as only half of patients had pain before and during urination at any time in this study, these pain items were excluded from this analysis, and without these questions the psychometric performance of the PPSM was maintained [23]. Each of the seven questions has a response range of 1–7, and therefore the PPSM total score ranges from 7 (best) to 49 (worst). Data for all three of the health outcome measures will also be assessed in the analysis at 4 years.

For statistical analyses we used the intent-to-treat population, using the last observation carried forward approach. The change from baseline in BII total scores and IPSS Q8 scores with combined therapy vs each monotherapy was assessed using *t*-tests from a general linear model with effects for treatment, cluster and baseline value at $\alpha = 0.01$. Changes in BII and IPSS Q8 score from baseline with combined therapy vs each monotherapy were assessed at 24 months

*FIG. 1. Adjusted mean (SEM) change in **a**, the BII score, **b**, the IPSS Q8, and **c**, PPSM total score, from baseline by visit and treatment group. At 24 months there was a reduction in BII score from baseline of −2.1, −1.7 and −1.5 in the combination, dutasteride and tamsulosin groups, respectively. The improvement in BII score was statistically greater at 24 months (P < 0.001) with combined therapy than with each monotherapy, and the onset of significance was from 3 months for the combination vs dutasteride (P = 0.002) and from 9 months for the combination vs tamsulosin (P = 0.008). **b,** At 24 months the change in IPSS Q8 from baseline was −1.4 with the combination, −1.1 with dutasteride and −1.1 with tamsulosin. The reduction in score was statistically greater at 24 months (P < 0.001) with the combination than with each monotherapy, and the onset of significance was from 3 months for the combination vs dutasteride (P < 0.001) and from 12 months for the combination vs tamsulosin (P < 0.001). **c,** At 24 months the mean change in PPSM total score from baseline was −6.7 with the combination, −5.1 with dutasteride and −4.8 with tamsulosin. The reduction in score at 24 months was statistically greater (P < 0.001) with combination than with each monotherapy, and the onset of significance was from 3 months for the combination vs dutasteride (P < 0.01) and from 12 months for the combination vs tamsulosin (P < 0.01).*
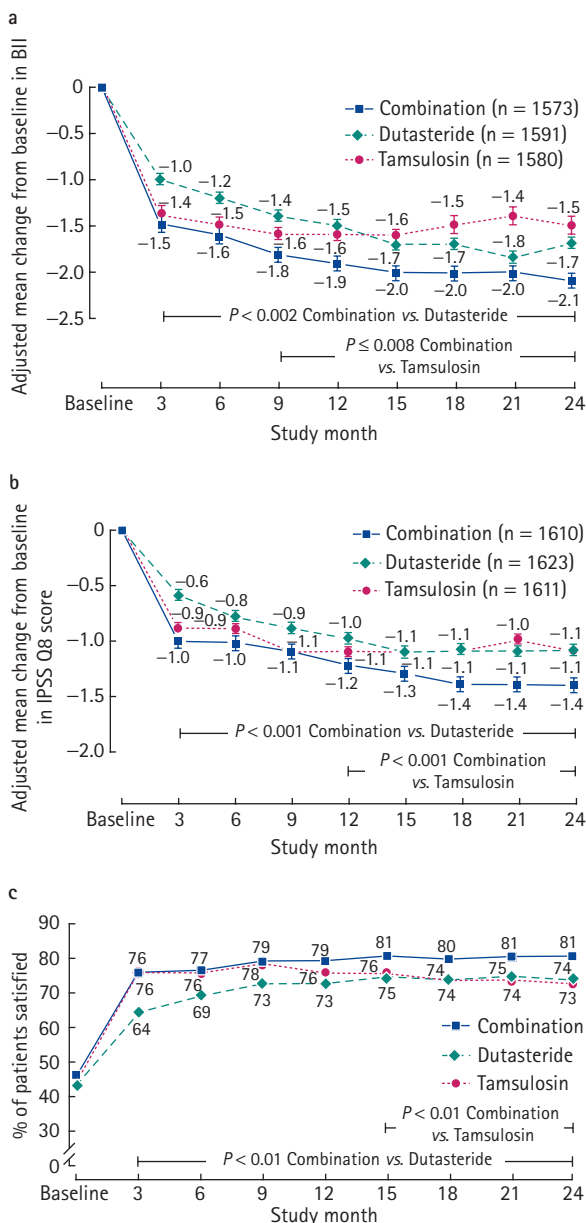
and then at each visit after baseline in a predefined hierarchical manner. BII and IPSS total score data are presented as adjusted mean (SEM) changes from baseline; BII individual question data are presented as arithmetic mean changes from baseline.

Responses to the 12 individual questions of the PPSM were categorized as either positive or negative; positive responses were any improvement for questions on improvement, or any satisfaction for questions on satisfaction, and yes for question 12; negative responses were no change or worsening for questions on improvement, neutral or any dissatisfaction for questions on satisfaction, and no or not sure for question 12. The proportions of patients with positive or negative responses in the combined therapy group and each monotherapy group were then compared using a Mantel-Haenszel test controlling for cluster at $\alpha = 0.01$. The latter value was selected to ensure a statistically powerful finding. PPSM total score (for questions 1–4 and 9–11) was analysed posthoc, after the results of psychometric analyses that confirmed the scoring of the questionnaire, with results presented as adjusted mean (SEM) changes from baseline.

RESULTS

The mean baseline BII score was 5.3 in all three treatment groups; baseline scores for the four individual questions of the BII were also similar across the treatment groups. At 24 months there was a mean (SEM) reduction (improvement) in BII score from baseline of −2.1 (0.07), −1.7 (0.07) and −1.5 (0.07) in the combination, dutasteride and tamsulosin groups, respectively; the improvement in BII score was statistically (P < 0.001) greater with combined therapy than with each monotherapy (Fig. 1a). The adjusted mean change in BII score at 24 months was −0.35 (0.092) between the combination and dutasteride groups and −0.62 (0.092) between the combination and tamsulosin groups. The improvement in BII score from baseline with combined therapy was statistically greater than with dutasteride from 3 months and with tamsulosin from 9 months (Fig. 1a).

The individual mean baseline BII scores were 1.3, 1.4, 1.6 and 1.0 for questions 1, 2, 3 and 4, respectively. For each of the four individual BII questions, the reduction in score from

baseline at 24 months was numerically greater with combined therapy than with each monotherapy (Table 1). The mean reduction in score for each of the four individual questions was numerically greater with combined therapy vs dutasteride at each 3-month sample time and vs tamsulosin from 12 months onwards, with few exceptions.

The mean baseline IPSS for Q8 was 3.6 in each treatment group. At 24 months the change in IPSS Q8 from baseline was -1.4 (0.03) with the combination, -1.1 (0.03) with dutasteride and -1.1 (0.03) with tamsulosin; the reduction in score was statistically greater with the combination than with each monotherapy ($P < 0.001$; Fig. 1b). The adjusted mean change in IPSS Q8 was -0.23 (0.045) between the combination and dutasteride and -0.30 (0.045) between the combination and tamsulosin. The greater improvement in IPSS Q8 from baseline with combined therapy was statistically significant from 3 months vs dutasteride and from 12 months vs tamsulosin.

At baseline, the proportions of patients reporting a positive response to each of the 12 PPSM questions did not differ significantly between treatment groups (Table 2). At 24 months the proportion of patients reporting an improvement, satisfaction or desire to request study treatment in response to each of the 12 satisfaction questions was significantly higher in the combination group than with each monotherapy ($P < 0.01$), except for question 5 on pain, for which the superiority of the combination vs tamsulosin did not reach statistical significance ($P = 0.02$).

At 24 months the proportion of patients reporting any satisfaction with treatment in response to question 11 was significantly higher with the combination (81%) than with dutasteride (74%) or tamsulosin (73%). The proportion of patients reporting any satisfaction was significantly higher with the combination than with dutasteride from 3 months and with tamsulosin from 15 months (Fig. 2).

The PPSM total score (questions 1–4 and 9–11) at baseline was not significantly different between treatment groups. At 24 months the mean change in PPSM total score from baseline was -6.7 (0.19) with the combination, -5.1 (0.19) with dutasteride and -4.8 (0.19) with tamsulosin; the reduction in

TABLE 1 *The mean changes in scores for individual BII questions from baseline at 24 months*

Question	Mean change at 24 months		
	Combination	Dutasteride	Tamsulosin
1 (physical discomfort)	−0.5	−0.4	−0.4
2 (worry)	−0.6	−0.5	−0.4
3 (level of bother)	−0.6	−0.5	−0.5
4 (effect on normal activities)	−0.4	−0.3	−0.3
Total score	−2.1	−1.7	−1.5

FIG. 2. *The proportion of patients reporting satisfaction overall with treatment and its effect on their urinary symptoms (question 11 of the PPSM). At 24 months the proportion of patients reporting any satisfaction with treatment in response to question 11 was significantly higher with the combination (81%) than with dutasteride (74%) and than with tamsulosin (73%), and the onset of significance was from 3 months for the combination vs dutasteride (P < 0.001) and from 15 months for the combination vs tamsulosin (P < 0.01).*
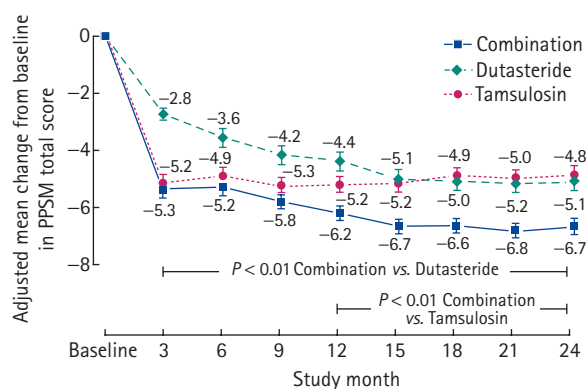
score at 24 months was statistically greater with the combination than with each monotherapy ($P < 0.001$). As statistical significance was reached at 24 months (secondary endpoint), earlier time points were then analysed. At 12 months the change in PPSM total score from baseline was -6.2 (0.18) with the combination, -4.4 (0.18) with dutasteride and -5.2 (0.18) with tamsulosin. The reduction in total score at 12 months was statistically greater with the combination than with each monotherapy ($P < 0.001$; Fig. 1c).

DISCUSSION

The equal importance of assessing patient-reported health outcomes, in addition to objective measures, is recognized in clinical practice guidelines for the management of BPH [10,24]. The analyses from CombAT presented here show that combined therapy with dutasteride and tamsulosin provides significantly greater improvements in patient-reported QoL, as assessed with BII and

IPSS Q8, and in treatment satisfaction, measured using the recently developed validated PPSM questionnaire, than each monotherapy in men with moderate-to-severe LUTS and prostate enlargement. CombAT is the first study to show long-term superiority of the combination over both monotherapies in improving patient-reported QoL and treatment satisfaction.

As recently reported, symptom improvements in CombAT were significantly greater with combined therapy from 3 months vs dutasteride and from 9 months vs tamsulosin [20]. Over the 2-year period, the margin of benefit of the combination over dutasteride was relatively constant, while the benefit of the combination over tamsulosin increased from 15 months as the improvement was sustained in the combination arm but tended to decline in the tamsulosin arm. The pattern of improvements was similar for the two QoL measures; the improvements in BII and IPSS Q8 from baseline with the combination were significant from 3 months vs dutasteride and from 9 months (BII) or 12 months (IPSS Q8) vs

TABLE 2 Responses to the 12 individual PPSM questions by treatment group at baseline, 12 and 24 months

PPSM question	% of patients with any improvement/satisfaction		
	Combination	Dutasteride	Tamsulosin
Q1. Improvement in control of urinary problems			
Baseline	44	41	45
12	81*†	74	77
24	81*†	75	76
Q2. Satisfaction with control of urinary problems			
Baseline	45	41	43
12	78*	71	75
24	80*†	73	73
Q3. Improvement in strength of urinary stream			
Baseline	40	38	39
12	75*†	66	70
24	77*†	67	67
Q4. Satisfaction with change in strength of urinary stream			
Baseline	40	37	39
12	73*	65	69
24	76*†	67	66
Q5. Improvement in pain before urination			
Baseline	39	37	39
12	72*	64	68
24	75*	67	69
Q6. Satisfaction with change in pain prior to urination			
Baseline	41	38	39
12	70*	62	67
24	71*†	64	65
Q7. Improvement in pain during urination			
Baseline	38	35	39
12	72*	64	70
24	75*†	67	69
Q8. Satisfaction with change in pain during urination			
Baseline	40	38	39
12	70*	60	67
24	71*†	63	66
Q9. Improvement in level of interference with daily activities			
Baseline	32	30	31
12	71*	64	69
24	73*†	66	66
Q10. Satisfaction with change in level of interference with daily activities			
Baseline	39	35	37
12	75*†	67	71
24	76*†	70	69
Q11. Overall satisfaction with improvement in urinary problems			
Baseline	46	43	44
12	79*	73	76
24	81*†	74	73
Q12. Would you ask your doctor for the medication you received in the study? Yes			
Baseline	38	35	37
12	62	58	61
24	65*†	60	60

*P < 0.01 for combination vs dutasteride; †P < 0.01 for combination vs tamsulosin.

tamsulosin. The BII continued to improve with the combination and with dutasteride over the 2 years, but had a tendency to decline with tamsulosin from 15 months. The IPSS Q8 continued to improve from baseline up to 18 months in the combination arm, whereas it reached a plateau in the tamsulosin and dutasteride arms at 9 and 15 months, respectively. The improvement in BII from baseline with dutasteride was slightly greater than that reported for dutasteride in the Phase III trials, most likely due to the lack of a placebo arm and the slightly higher mean baseline BII in CombAT [13]. The improvements in BII and IPSS Q8 with tamsulosin were slightly smaller than those reported with tamsulosin in pivotal trials, probably as a result of the higher baseline prostate volume in CombAT [10].

Over a treatment period of 13 weeks in previous studies, mean improvements in BII score from baseline of −0.5, −1.1 and −2.2 have been reported to be associated with a slight, moderate and marked improvement, as perceived by the patient [21]. Therefore, the minimum reduction in BII score from baseline considered to be clinically relevant is 0.5 [21], and in CombAT the reduction in BII from baseline was >0.5 by the first visit in all treatment groups. The mean improvements in BII score from baseline were greater than the threshold for a moderate perceived improvement in all treatment groups by 6 months, and in the combination group approached the threshold for a perceived marked improvement from 15 months and reached −2.1 by 24 months.

The earlier, large-scale 5ARI and α-blocker combined trial, MTOPS, did not assess disease-specific QoL in any detail. In the 1-year Veteran Affairs Co-operative study, finasteride and terazosin combined therapy was superior to finasteride but not terazosin alone in improving symptoms, symptom problem score, BII and overall assessment of improvement [25]. In CombAT, which used the dual 5ARI dutasteride, combined therapy was significantly better than tamsulosin in improving the BII score from 9 months and in improving the IPSS Q8 from 12 months.

The lack of benefit of the combination over α-blocker monotherapy in the Veteran Affairs study might have been due to the short duration of the study, presumed small-volume prostates, the study population, or the 5ARI and α-blocker used. The threshold AUA

score for inclusion was 8, and there was no prostate volume threshold in the inclusion criteria (the AUA Symptom Index is identical to the seven symptom questions of the IPSS). This is in contrast to CombAT, which enrolled patients with larger prostates, higher serum PSA values and a higher minimum IPSS (12 vs 8, i.e. a greater risk for progression), as well as using the dual 5ARI dutasteride.

The overall assessment of improvement used in the Veteran Affairs study was very basic, and simply asked patients to what extent their condition had improved by selecting from one of the following options: worse, unchanged, slightly improved, moderately improved or markedly improved [18]. By contrast, the PPSM is a more robust assessment of satisfaction and improvement.

The PPSM comprises 12 questions that assess treatment satisfaction over several different domains, including control of urinary symptoms, strength of urinary stream, pain of urination, effect on usual activities and overall satisfaction. For each of the domains there is one question on the perceived change, and another on the level of satisfaction with that change. The final question assesses the patient's desire to receive the study medication after the trial. In our analyses, significantly higher proportions of patients responded positively (improvement, satisfaction or a desire to request the study medication) in response to the 12 PPSM satisfaction questions with the combination than with each monotherapy, except for question 5. For this question, which assessed pain before urination, the superiority of the combination over tamsulosin was not statistically significant. However, about half the patients across the treatment groups had no such pain, which might have limited the power to detect a treatment difference. It is also not clear whether pain before urination relates to urgency or some other condition. In addition, the improvement in PPSM total score (questions 1–4 and 9–11, without the pain domain) from baseline was statistically greater with the combination than with each monotherapy at 12 and 24 months. The PPSM has shown significant, moderate correlations with both IPSS Q8 and BII; however, the lack of perfect correlation indicates that the PPSM is providing additional information to that captured by IPSS Q8 and BII, and might give a better prediction as to the potential compliance of the patient and long-term effects of the drug.

One limitation of the CombAT study is the absence of a placebo arm, which might have resulted in slightly over-estimated responses. The decision not to include a placebo arm was mainly based on ethical considerations. Each drug had already shown superiority over placebo in other trials, and the 4-year total duration seemed to make a placebo group unacceptable to institutional review boards, particularly in patients already at high risk for progression. However, the effect would apply equally to all three treatment arms. The patients' responses to the QoL and particularly to the PPSM questionnaire might potentially have been influenced by the suggestive nature of the questions. However, this limitation is inherent to all such questionnaires, which remain the only instruments for obtaining valuable information on the benefits of therapies as perceived by the patient. The consistent effects observed across all questionnaires and the symptom measures strengthen the confidence in the study results, even without a placebo arm.

In conclusion, the present data from the pre-planned 2-year analysis of the CombAT study show that combination therapy with dutasteride and tamsulosin provides significantly greater improvements in patient-reported, disease-specific QoL and treatment satisfaction than with both monotherapies at 2 years in men with moderate-to-severe BPH symptoms and prostate enlargement. This follows the reporting of the CombAT primary results, which showed superiority of the combined therapy over the monotherapies in improving symptoms and Q_{max}.

The benefits of the combination over the monotherapies in improving QoL, like the benefits in improving symptoms and Q_{max}, were significant within the first 12 months and sustained over the 2 years of treatment. The 4-year CombAT data will provide information on the effect of combined therapy compared with each monotherapy on the risks of AUR, surgery and symptom progression, and further valuable information on the long-term benefits on patient-reported health outcomes.

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CONFLICT OF INTEREST

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Abbreviations: **QoL**, quality of life; **AUR**, acute urinary retention; **5–ARI**, 5α-reductase inhibitor; **MTOPS**, Medical Therapy of Prostatic Symptoms; **BII**, BPH Impact Index; **PPSM**, Patient Perception of Study Medication; **Q$_{max}$**, peak urinary flow rate.

APPENDIX

BII

Q1. Over the past month, how much physical discomfort did any urinary problems cause you?

None	Only a little	Some	A lot
0	1	2	3

Q2. Over the past month, how much did you worry about your health because of any urinary problems?

Not at all bothersome	Bothers me a little	Bothers me some	Bothers me a lot
0	1	2	3

Q3. Overall, how bothersome has any trouble with urination been during the past month?

None of the time	A little of the time	Some of the time	Most of the time	All of the time
0	1	2	3	

Q4. Over the past month, how much of the time has any urinary problem kept you from doing the kinds of things you would normally do?

None of the time	A little of the time	Some of the time	Most of the time	All of the time
0	1	2	3	4

IPSS Q8

If you were to spend the rest of your life with your urinary condition just the way it is now, how would you feel about that?

Delighted						Terrible
0	1	2	3	4	5	6

PPSM questionnaire

1. Since you began taking the study medication, how has control of your urinary problems changed?

much improved	improved	somewhat improved	no change	somewhat worse	worse	much worse

2. How satisfied are you with the effect of the study medication on control of your urinary problems?

very satisfied	satisfied	somewhat satisfied	neutral	somewhat dissatisfied	dissatisfied	very dissatisfied

3. Since you began taking the study medication, how has the strength of your urinary stream changed?

much improved	improved	somewhat improved	no change	somewhat worse	worse	much worse

4. How satisfied are you with the effect of the study medication on the strength of your urinary stream?

very satisfied	satisfied	somewhat satisfied	neutral	somewhat dissatisfied	dissatisfied	very dissatisfied

5. Since you began taking the study medication, how has your pain prior to urinating changed?

much improved	improved	somewhat improved	no change	somewhat worse	worse	much worse

6. How satisfied are you with the effect the study medication has on your pain prior to urinating?

very satisfied	satisfied	somewhat satisfied	neutral	somewhat dissatisfied	dissatisfied	very dissatisfied

7. Since you began taking the study medication, how has your pain during urination changed?

much improved	improved	somewhat improved	no change	somewhat worse	worse	much worse

8. How satisfied are you with the effect the study medication has on your pain during urination?

very satisfied	satisfied	somewhat satisfied	neutral	somewhat dissatisfied	dissatisfied	very dissatisfied

9. Since you began taking the study medication, how has the way your urinary problems interfere with your ability to go about your usual activities changed?

much improved	improved	somewhat improved	no change	somewhat worse	worse	much worse

10. How satisfied are you with the effect the study medication has on your ability to go about your usual activities without interference with your usual activities?

very satisfied	satisfied	somewhat satisfied	neutral	somewhat dissatisfied	dissatisfied	very dissatisfied

11. Overall how satisfied are you with the study medication and its effect on your urinary problems?

very satisfied	satisfied	somewhat satisfied	neutral	somewhat dissatisfied	dissatisfied	very dissatisfied

12. Would you ask your doctor for the medication you received in this study?

yes	no	not sure