

Efficacy and Safety of Upadacitinib Maintenance Therapy in Patients With Moderately to Severely Active Ulcerative Colitis: Final Results From the Phase 3 U-ACHIEVE Maintenance Study

S  verine Vermeire,¹ Silvio Danese,² Wen Zhou,³ Xuan Yao,³ Dapo Ilo,³ Gweneth Levy,³ Xavier H  buterne,⁴ James O. Lindsay,⁵ Yuri Sanchez Gonzalez,³ Peter D.R. Higgins,⁶ Jean-Fr  d  ric Colombel,⁷ Remo Panaccione⁸

¹Department of Gastroenterology & Hepatology, University Hospital Leuven, Leuven, Belgium; ²Humanitas University and Humanitas Research Hospital, IRCCS, Milan, Italy; ³AbbVie Inc., North Chicago, IL, USA; ⁴Department of Gastroenterology and Clinical Nutrition, CHU de Nice, Universit   C  te d'Azur, Nice, France; ⁵Department of Gastroenterology, The Royal London Hospital, Barts Health NHS Trust, London, UK; ⁶Department of Internal Medicine, Division of Gastroenterology, University of Michigan, Ann Arbor, MI, USA; ⁷ICahn School of Medicine at Mount Sinai, New York, NY, USA; ⁸Division of Gastroenterology and Hepatology, University of Calgary, Calgary, AB, Canada

OBJECTIVE

To report further efficacy and safety data on upadacitinib (UPA) 15 mg and 30 mg once daily (QD) in moderately to severely active ulcerative colitis (UC) from U-ACHIEVE Maintenance, from a larger population than has been previously analyzed¹

CONCLUSIONS

Consistent with the primary analysis,¹ UPA 15 mg QD and 30 mg QD showed significantly greater efficacy than placebo as maintenance therapy across all primary and assessed secondary endpoints at 52 weeks

Both UPA doses were well tolerated and no new safety signals were observed compared with the smaller, primary analysis set¹ or other non-UC indications^{5,6}

These Phase 3 results from a larger patient population than previously reported¹ support the favorable benefit–risk profile of UPA as maintenance therapy in patients with moderately to severely active UC

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AbbVie and the authors thank the participants, study sites, and investigators who participated in this clinical trial. AbbVie funded this trial and participated in the trial design, research, analysis, data collection, interpretation of data, and the review and approval of the publication. All authors had access to relevant data and participated in the writing, review, and approval of the publication. No honoraria or payments were made for authorship. Medical writing support was provided by Fraser Harris, MSc, on behalf of AbbVie (Chicago, IL, USA). S. Vermeire has received grants, consulting and/or speaking fees from AbbVie, Astra Zeneca, Bristol Myers Squibb, Janssen, and Novartis. S. Danese has received research grants from AbbVie, Astra Zeneca, Bristol Myers Squibb, Janssen, and Novartis. X. Yao, D. Ilo, G. Levy, and Y. Sanchez are employees of AbbVie and may own stock and/or options. J. H  buterne reports research funding from Sanofi and advisory boards and/or participating in lectures and educational activities for AbbVie, Astra Zeneca, Bristol Myers Squibb, Janssen, and Novartis. J. O. Lindsay reports research funding from Sanofi and advisory boards and/or participating in lectures and educational activities for AbbVie, Astra Zeneca, Bristol Myers Squibb, Janssen, and Novartis. J. F. Colombel has received personal fees and/or grant support from AbbVie, Astra Zeneca, Bristol Myers Squibb, Janssen, and Novartis. J. F. Colombel has received personal fees and/or grant support from AbbVie, Astra Zeneca, Bristol Myers Squibb, Janssen, and Novartis. J. F. Colombel has received personal fees and/or grant support from AbbVie, Astra Zeneca, Bristol Myers Squibb, Janssen, and Novartis. J. F. Colombel has received personal fees and/or grant support from AbbVie, Astra Zeneca, Bristol Myers Squibb, Janssen, and Novartis.

References

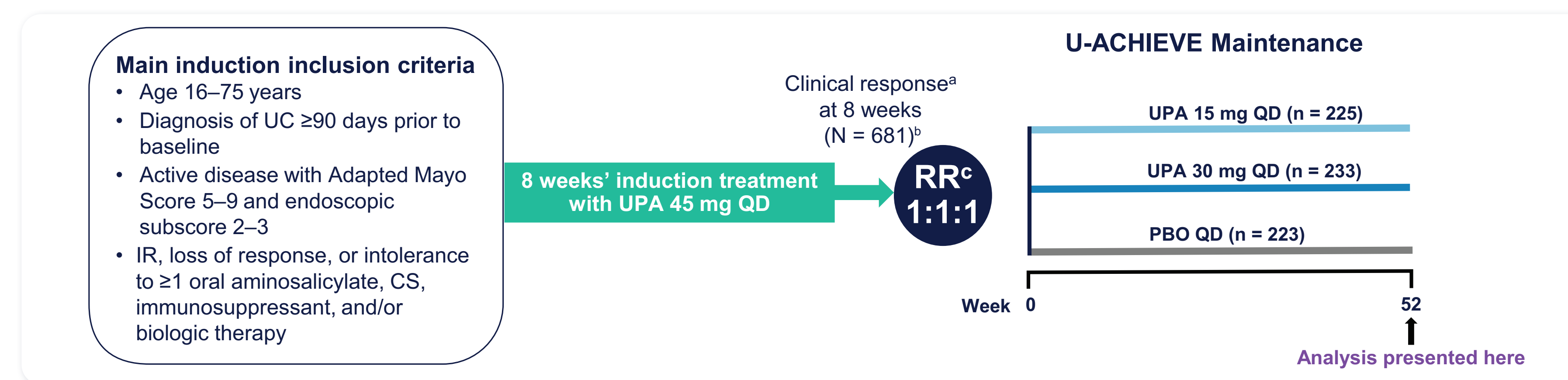
- Danese S, et al. *Lancet*. 2022;399:2113–22.
- Boland BS, et al. *Gastroenterol Clin North Am*. 2014;43:603–17.
- Danese S, et al. *Gut*. 2019;68:1993–9.
- Sandborn WJ, et al. *Gastroenterology*. 2020;158:2123–38.
- Simpson EL, et al. *JAMA Dermatol*. 2022;158:404–13.
- Fleischmann R, et al. *BMJ Open*. 2022;e002012.

BACKGROUND

- The Phase 3 program for UPA, an oral, selective, and reversible Janus kinase inhibitor, included 2 identical induction studies of UPA 45 mg QD (U-ACCOMPLISH [NCT03653026] and U-ACHIEVE Induction [NCT02819635]), and a maintenance study of UPA 15 mg QD and 30 mg QD (U-ACHIEVE Maintenance [NCT02819635]), for moderately to severely active UC
- Results from the placebo (PBO)-controlled induction studies and the primary analysis of the PBO-controlled maintenance study, which included the first 451 randomized patients, have been reported previously¹
 - Clinical, endoscopic, and histologic outcomes were significantly improved with both UPA 15 mg QD and 30 mg QD maintenance doses vs PBO after 52 weeks' maintenance treatment¹

METHODS

- This analysis included all treated patients in the Phase 3, double-blind, PBO-controlled clinical trial program who responded to 8 weeks' UPA 45 mg QD induction therapy (Figure 1), including the first 451 previously analyzed¹
 - Patients who received 16 weeks' extended induction therapy were not included in this analysis
- Efficacy endpoints were analyzed post-hoc in the full intent-to-treat (ITT) population, defined as all patients who achieved a clinical response after 8 weeks' UPA 45 mg QD induction treatment and were re-randomized to UPA 15 mg QD or 30 mg QD, or PBO, under 52-week protocol
- Safety analyses were pre-specified and performed in the full safety population, defined as the ITT population plus patients who received up to 44 weeks' maintenance therapy under earlier versions of protocol amendments



CS, corticosteroid; IR, inadequate response; PBO, placebo; QD, once daily; RBS, rectal bleeding subscore; RR, re-randomized; UC, ulcerative colitis; UPA, upadacitinib. ^aDefined as a decrease in Adapted Mayo Score of ≥2 points and ≥30% from baseline, plus a decrease in RBS of ≥1 or an absolute RBS of ≤1. ^b21 patients entered from the Phase 2b study. ^cThe randomization stratified by history of biologic failure, clinical remission status post-induction, and CS use at maintenance study baseline.

RESULTS

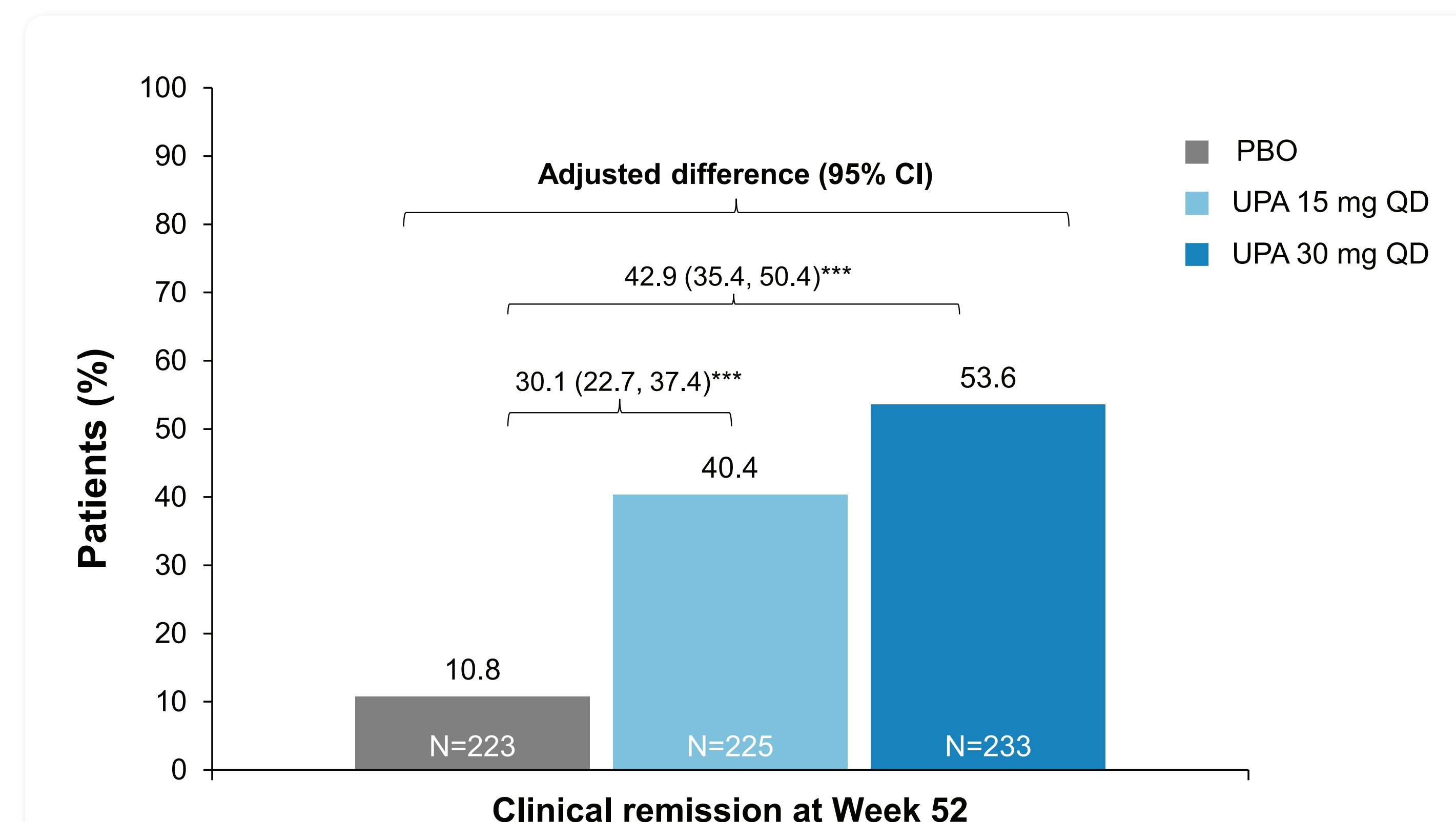
- Baseline characteristics were similar across treatment groups in the ITT population (Figure 2)
- A significantly greater proportion of patients achieved the primary endpoint (Figure 2), and all analyzed key secondary efficacy endpoints (Figures 3 and 4) with both doses of UPA vs PBO
- A summary of adverse events in the safety population is shown in Table 2

Table 1. Baseline Characteristics Were Generally Similar Across Treatment Groups

	All patients in ITT population (N = 681)		
	PBO (n = 223)	UPA 15 mg QD (n = 225)	UPA 30 mg QD (n = 233)
Female, n (%)	100 (44.8)	79 (35.1)	92 (39.5)
Age, years	42.4 (14.5)	41.7 (14.2)	43.0 (14.6)
Weight, kg	72.1 (18.2)	72.7 (19.7)	72.8 (19.1)
Disease duration, years	8.4 (7.8)	8.2 (7.3)	7.9 (6.9)
CS use, n (%)	84 (37.7)	84 (37.3)	84 (36.1)
5-aminosalicylate use, n (%)	146 (65.5)	160 (71.1)	168 (72.1)
Adapted Mayo Score	7.0 (1.2)	6.9 (1.2)	7.0 (1.3) ^a
≤7, n (%)	131 (58.7)	140 (62.2)	137 (59.3) ^a
>7, n (%)	92 (41.3)	85 (37.8)	94 (40.7) ^a
Fecal calprotectin, mg/kg, median (range)	1679 (30, 28,800) ^b	1707 (30, 28,800) ^b	1580 (30, 28,800) ^b
hs-CRP, mg/L, median (range)	3.9 (0.2, 105.0)	3.6 (0.2, 83.3)	4.1 (0.2, 107.0)
Bio-IR, n (%)	116 (52.0)	109 (48.4)	111 (47.6)
Prior TNFi exposure, n (%)	107 (48.0)	104 (46.2)	107 (45.9)
IBDQ total score	123.3 (34.7) ^c	126.8 (34.6) ^c	122.9 (35.1) ^c
FACIT-F score	30.2 (11.5) ^d	31.9 (11.1) ^d	30.5 (11.8) ^d

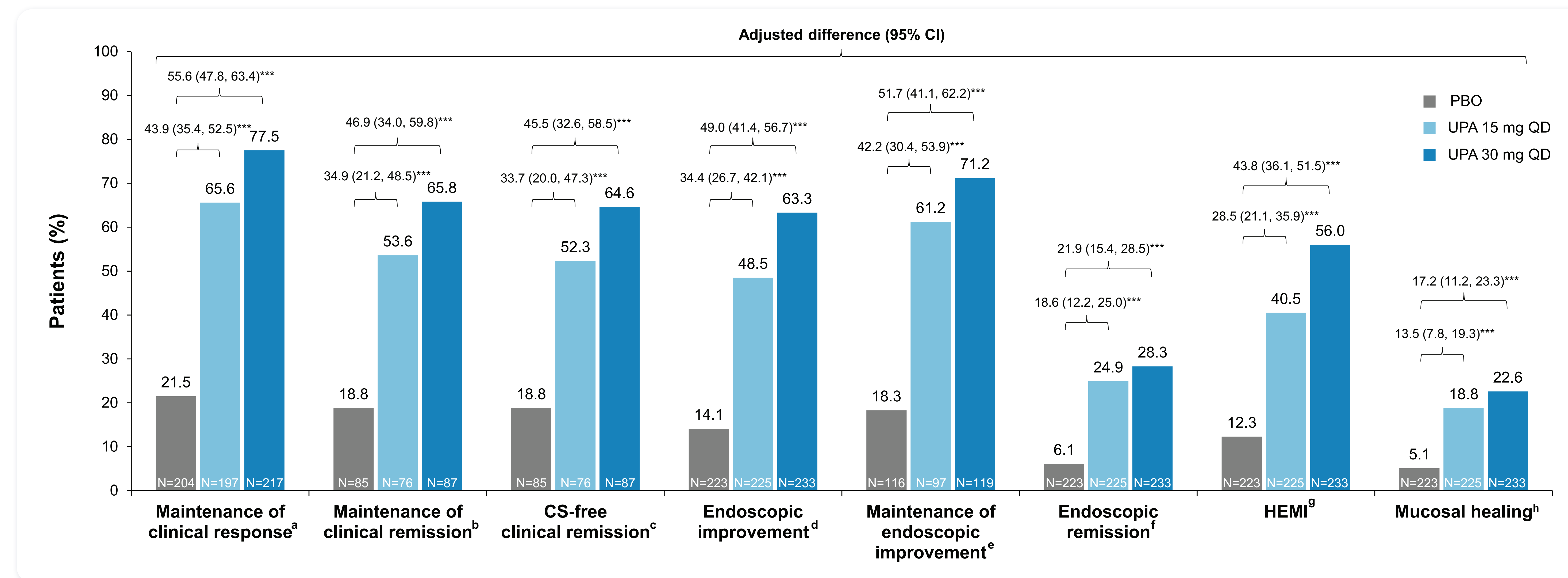
bio-IR, biologic inadequate response; CS, corticosteroid; FACIT-F, Functional Assessment of Chronic Illness Therapy – Fatigue; hs-CRP, high-sensitivity C-reactive protein; IBDQ, Inflammatory Bowel Disease Questionnaire; ITT, intent-to-treat; PBO, placebo; QD, once daily; TNFi, tumor necrosis factor inhibitor; UPA, upadacitinib. All values are mean (standard deviation) unless otherwise stated. ^a*P* < .05. ^b*P* < .001. ^c*P* < .001. ^d*P* < .001.

Figure 2. Primary Endpoint: Clinical Remission Rates at Week 52^a Were Significantly Better With Both UPA Doses vs PBO



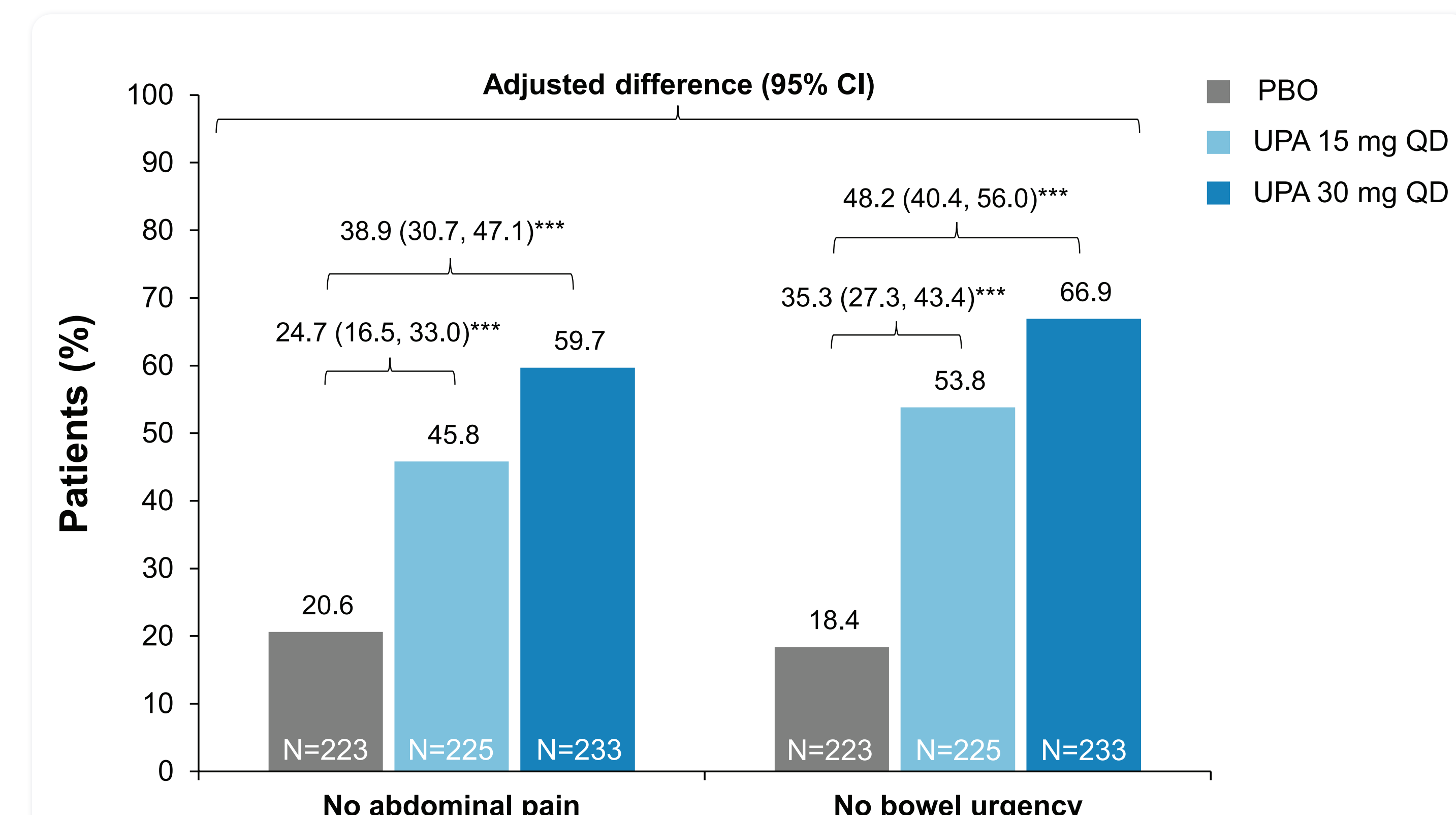
CI, confidence interval; PBO, placebo; QD, once daily; UPA, upadacitinib. ^aDefined as Adapted Mayo Score ≤2, with stool frequency subscore ≤1 and not greater than baseline, rectal bleeding subscore = 0, and endoscopic subscore ≤1 without friability. ^{***}*P* < .001.

Figure 3. Key Secondary Clinical, Endoscopic, and Mucosal Endpoints Were Achieved at Week 52 by a Significantly Greater Proportion of Patients With Both UPA Doses vs PBO



CI, confidence interval; CS, corticosteroid; ES, endoscopic subscore; HEMI, histologic–endoscopic mucosal improvement; PBO, placebo; QD, once daily; RBS, rectal bleeding subscore; UPA, upadacitinib. ^a*P* < .001. ^bClinical response (decrease in Adapted Mayo Score of ≥2 points and ≥30% from baseline, plus a decrease in RBS of ≥1 or an absolute RBS of ≤1) at week 52 among patients who achieved a clinical response at the end of induction therapy. ^cClinical remission (defined as Adapted Mayo Score ≤2, with stool frequency subscore ≤1 and not greater than baseline, RBS = 0, and ES ≤1 without friability) at week 52 among patients who achieved clinical remission at the end of induction therapy. ^dClinical remission (defined as Adapted Mayo Score ≤2, with stool frequency subscore ≤1 and not greater than baseline, RBS = 0, and ES ≤1 without friability) at week 52 and CS-free for ≥90 days immediately prior to week 52 among patients who achieved clinical remission at the end of induction therapy. ^eES ≤1. ^fES ≤1 among patients who achieved endoscopic improvement (defined as ES ≤1) at the end of induction therapy. ^gES = 0. ^hES = 0 and Geboes score ≤2.

Figure 4. Key Secondary Symptom Endpoint Achievement at Week 52 Was Significantly Increased With Both UPA Doses vs PBO



CI, confidence interval; PBO, placebo; QD, once daily; UPA, upadacitinib. ^{***}*P* < .001.

Table 2. Overview of AEs

Events/100 PY	N = 746		
	PBO (n = 245) 135.0 PY	UPA 15 mg QD (n = 250) 199.4 PY	UPA 30 mg QD (n = 251) 218.5 PY
Any AE	494.1	314.1	315.6
Any serious AE	20.8	12.0	10.0
AEs leading to discontinuation	19.1	5.5	8.7
AEs leading to death	0	0	0
AEI			
Serious infection	5.9	5.0	3.2
Opportunistic infection	1.6	0.9	0.9
Herpes zoster	0	5.8	7.3
Malignancy (excluding NMSC)	0.8	0.5	0.9
NMSC	0	0	1.4
Renal dysfunction	0.8	0.5	0.5
Hepatic disorder	5.9	17.4	9.1
Adjudicated GI perforation	1.6	0	0
Adjudicated MACE ^{a,b}	0.7	0	0.5
Adjudicated VTE ^{a,c}	0	1.0	0.9
Anemia	13.8	6.1	4.6
Neutropenia	5.1	5.5	8.7
Lymphopenia	3.4	5.0	3.2
CPK elevation	3.9	8.1	10.1

AE, adverse event; AEI, adverse event of special interest; CPK, creatine phosphokinase; GI, gastrointestinal; MACE, major adverse cardiovascular event; NMSC, non-melanoma skin cancer; PBO, placebo; PY, patient-years; QD, once daily; UPA, upadacitinib; VTE, venous thromboembolic event. All AEs were defined according to the Medical Dictionary of Regulatory Activities preferred terms. Data are study size adjusted. AEIs were pre-specified based on previous studies.^{2–4} ^aAll UPA-treated patients who experienced a VTE or MACE had ≥1 known risk factor. ^bDefined as cardiovascular death, non-fatal myocardial infarction, and non-fatal stroke. ^cDefined as deep vein thrombosis and pulmonary embolism (fatal and non-fatal).