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CLINICAL RESPONSES TO UPADACITINIB OR ABATACEPT IN PATIENTS WITH RHEUMATOID ARTHRITIS BY TYPE OF PRIOR BIOLOGIC DISEASE-MODIFYING ANTIRHEUMATIC DRUG: DATA FROM THE PHASE 3 SELECT-CHOICE STUDY

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Background: In the phase 3 double-blind SELECT-CHOICE study of patients (pts) with prior inadequate response (IR) or intolerance to biologic disease-modifying antirheumatic drugs (bDMARDs), upadacitinib (UPA) showed superiority to abatacept (ABA) in change from baseline in 28-joint Disease Activity Score using C-reactive protein (DAS28(CRP)) and in the proportion of pts achieving DAS28(CRP) <2.6 at Week 12.

Objectives: To describe clinical responses in pts receiving UPA or ABA by number and mechanism of action of prior bDMARDs.

Methods: 612 pts were randomized to once-daily UPA 15mg or monthly intravenous ABA (<60 kg, 500 mg; 60–100 kg, 750 mg; >100 kg, 1000 mg). All pts continued background therapy with stable conventional synthetic DMARDs. From Week 12, pts who did not achieve ≥20% improvement in both tender and swollen joint counts vs baseline at 2 consecutive visits had background medication(s) adjusted or added. In this post hoc analysis, pts were grouped by the number and/or type of bDMARD received prior to enrollment: 1) lack of efficacy (LoE) to ≥1 tumor necrosis factor (TNF) inhibitor; 2) LoE to ≥1 interleukin-6 (IL-6) inhibitor; 3) intolerance to prior bDMARDs; 4) number of prior bDMARDs (1, 2, or ≥3). Mean change from baseline in DAS28(CRP) and DAS28(CRP) <2.6 and other clinical endpoints were evaluated at Weeks 12/24.

Results: Most pts had LoE to ≥1 TNF inhibitor (536, 87.6%); 96 (15.7%) had LoE to an IL-6 inhibitor; 79 (12.9%) had intolerance to prior bDMARDs; 408 (66.7%), 134 (21.9%), and 64 (10.5%) had received 1, 2, or ≥3 prior bDMARDs, respectively. Mean change from baseline in DAS28(CRP) was generally greater with UPA vs ABA across the different pt subgroups at Weeks 12/24 (Figure 1). Across endpoints, regardless of prior bDMARD therapy (except in those who failed ≥3

prior bDMARDs), UPA and ABA demonstrated similar responses at Week 12 compared with those observed for the overall treatment groups, even with more stringent criteria such as ACR70 and Clinical Disease Activity Index (CDAI) ≤2.8 (Table 1, below). Responses at Week 24 followed a similar trend to those at Week 12 for DAS28(CRP) <2.6 and other endpoints (Table 1). The safety profile across subgroups was consistent with each respective treatment in the overall study population (data not shown).

Conclusion: Although sample sizes were small for some subgroups, treatment with UPA led to greater clinical responses vs ABA at Week 12, including in pts with LoE to TNF or IL-6 inhibitors, and those with IR or intolerance to 1, 2, or ≥3 prior bDMARDs.

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Table 1. Efficacy endpoints by prior bDMARD subgroup (Week 12 [top] and Week 24 [bottom])^a

		ACR20	ACR50	ACR70	DAS28(CRP) ≤3.2	DAS28(CRP) <2.6	CDAI ≤10	CDAI ≤2.8	HAQ-DI MCID ^b
LoE to ≥1 TNF inhibitor	UPA 15 mg n=263	75.3	44.9	22.8	49.0	30.4	40.7	9.1	75.5
	ABA	77.9	59.7	38.8	61.2	46.8	58.6	22.8	74.3
	n=273	64.5	33.7	13.2	27.5	12.5	33.7	2.2	65.2
LoE to ≥1 IL-6 inhibitor	UPA 15 mg n=48	72.9	48.4	24.9	46.5	29.7	49.8	12.5	66.3
	ABA	70.8	37.5	20.8	45.8	25.0	41.7	6.3	78.3
	n=48	85.4	66.7	29.2	66.7	41.7	58.3	16.7	78.3
Intolerance to prior bDMARDs	UPA 15 mg	77.1	41.7	22.9	25.0	14.6	27.1	2.1	75.0
	ABA	79.2	56.3	27.1	43.8	29.2	52.1	10.4	75.0
	n=47	83.0	53.2	17.0	53.2	31.9	44.7	8.5	80.0
1 prior bDMARD	UPA 15 mg	76.6	57.4	27.7	57.4	29.8	44.7	14.9	73.3
	ABA	62.5	28.1	0.0	21.9	6.3	21.9	3.1	61.3
	n=32	77.9	50.0	31.3	56.3	31.3	56.3	9.4	67.7
2 prior bDMARDs	UPA 15 mg	77.2	51.9	21.8	52.4	32.5	41.7	9.2	79.6
	ABA	81.1	63.1	38.8	66.0	47.6	61.2	20.9	76.6
	n=206								
≥3 prior bDMARDs	UPA 15 mg	67.3	35.1	15.8	29.2	12.4	36.1	3.0	66.7
	ABA	77.7	53.5	33.7	51.5	35.6	55.9	16.3	71.7
	n=64	78.1	34.4	23.4	51.6	26.6	45.3	4.7	73.8
bDMARDs	UPA 15 mg	76.6	56.3	39.1	62.5	50.0	54.7	23.4	70.5
	ABA	64.3	28.6	4.3	27.1	11.4	28.6	1.4	55.7
	n=70	64.3	42.9	11.4	41.4	24.3	44.3	8.6	55.7
≥3 prior bDMARDs	UPA 15 mg	55.2	24.1	17.2	27.6	20.7	27.6	10.3	58.6
	ABA	65.5	44.8	24.1	41.4	27.6	48.3	17.2	72.4
	n=35	65.7	40.0	20.0	28.6	20.0	37.1	2.9	77.1
		71.4	40.0	17.1	37.1	20.0	40.0	8.6	74.3

^aMissing information was imputed using NRI. ^bHAQ-DI MCID=reduction from baseline of ≥0.22ACR20/50/70, 20/50/70% improvement in ACR criteria; HAQ-DI, Health Assessment Questionnaire-Disability Index