Supplemental Table 1. Median Time From Baseline to ≥30%, ≥50%, ≥70% Pain Improvement in the SELECT-PsA 1 and 2 Studies and SELECT-AXIS 1 Study

	Median Time From Baseline, wk								
	SELECT-PsA 1			SELECT-PsA 2			SELECT-AXIS 1		
Study Treatment	**≥30%**	**≥50%**	**≥70%**	**≥30%**	**≥50%**	**≥70%**	**≥30%**	**≥50%**	**≥70%**
UPA 15 mg*	4.1	9.1	33.1	4.3	12.1	56.4	4.1[†]	8.6[†]	24.1[†]
PBO-to-UPA 15 mg*	13.1	28.6	57.1	56.1	>58.6	>56.1	15.0	16.7	40.1
Overall PBO[‡]	15.9	25.0	>24.4	>24.1	26.1	>20.1	-	-	-
ADA 40 mg*	4.3	12.1	45.1	-	-	-	-	-	-

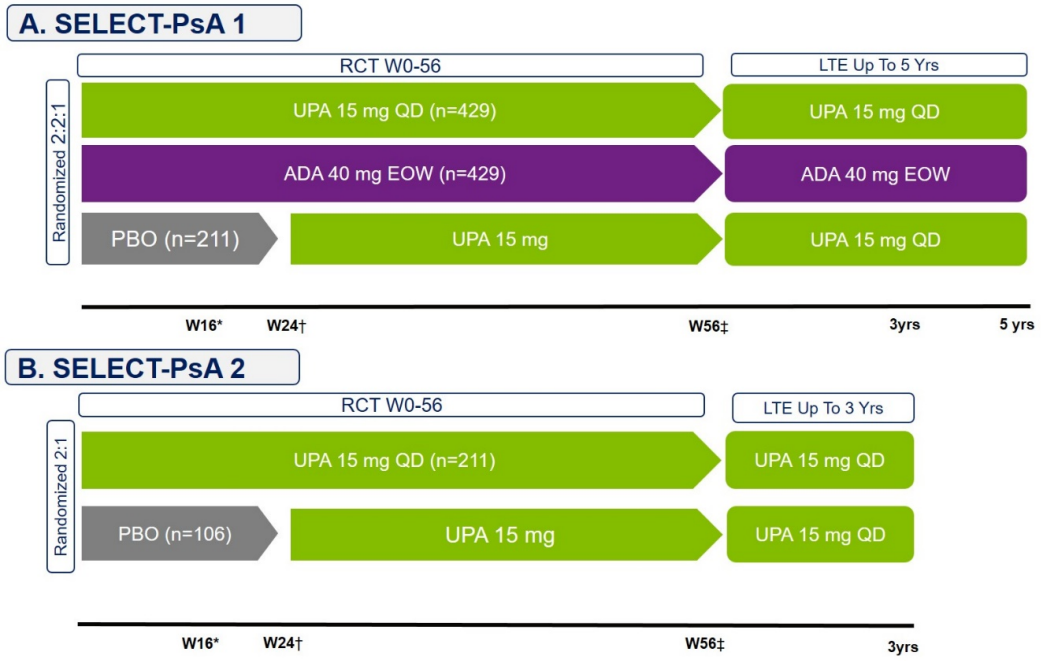
ADA, adalimumab; PBO, placebo; UPA, upadacitinib.

*Median time to pain improvement calculated with data up to week 56 visit window in SELECT-PsA 1 and 2 and up to week 64 visit window in SELECT-AXIS 1. Of note, median time to a certain pain improvement in PBO-to-UPA 15-mg group of SELECT-PsA 2 may not be reached in the follow-up period, denoted by > sign in the table.

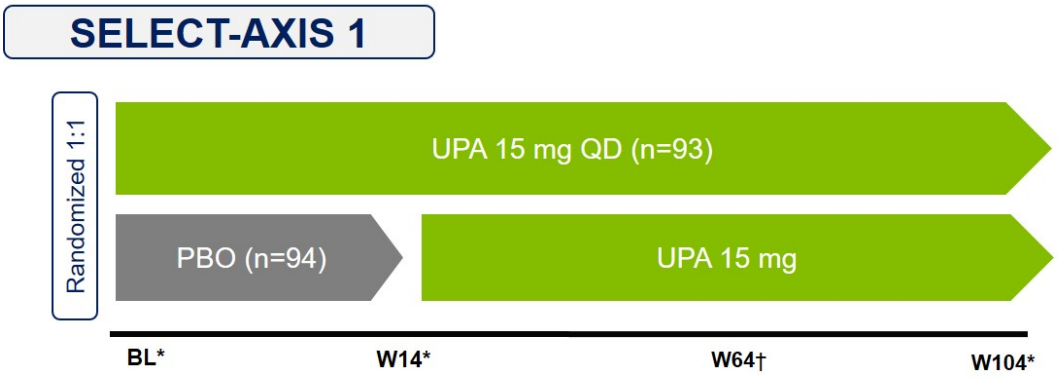
[†]*P*<0.0001 (nominal *P* value based on Gray's test) for UPA 15 mg vs PBO for all 3 pain improvements based on data in the PBO-controlled period up to week 14 visit window.

[‡]Median time to pain improvement for overall PBO arm in SELECT-PsA 1 and 2 calculated with data up to week 24 visit window. Median time to a certain pain improvement in a certain study may not be reached in the follow-up period, denoted by > sign in the table.

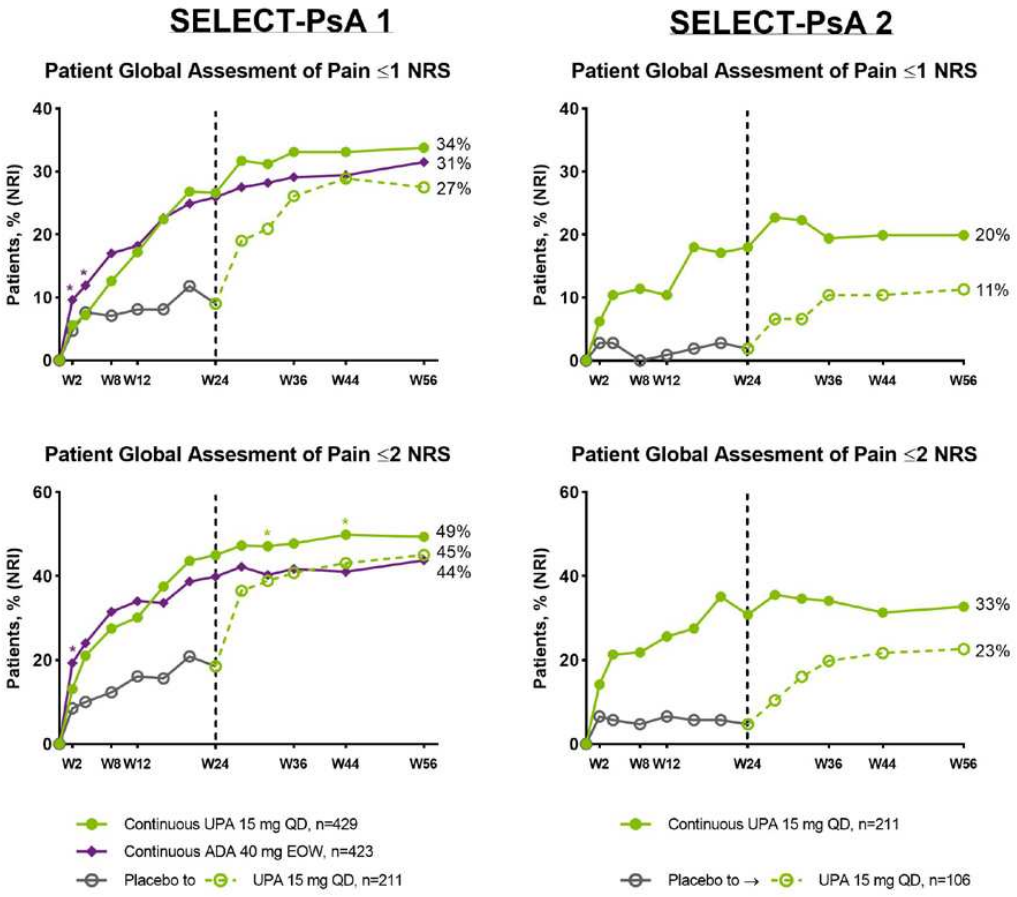
Supplemental Figure 1. SELECT-PsA 1 and PsA 2 Treatment Arms Included in the Analysis. ADA, adalimumab; EOW, every other week; LTE, long-term extension; PBO, placebo; QD, once daily; RCT, randomized controlled trial; SJC; swollen joint count; TJC, tender joint count; UPA, upadacitinib, W, week. *Optimization of background therapy permitted at week 16 based on improvement in SJC+TJC. †Switch from PBO to UPA. ‡Interim analysis at week 56 presented here. In SELECT-PsA 2 study, an additional treatment arm of UPA 30 mg QD was included in the study but is not included in this analysis.



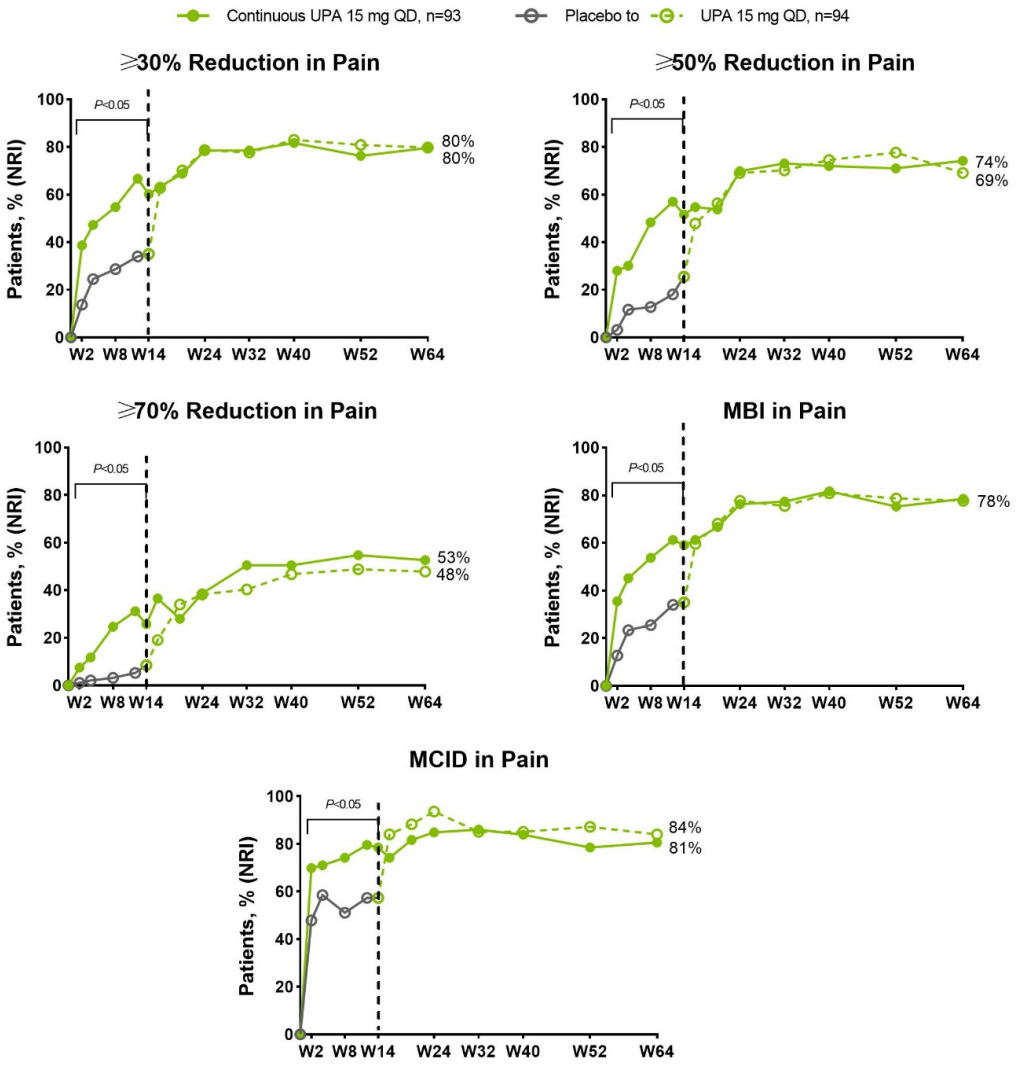
Supplemental Figure 2. SELECT-AXIS 1 Treatment Arms Included in the Analysis. BL, baseline; MRI, magnetic resonance imaging; PBO, placebo; QD, once daily; UPA, upadacitinib; W, week. *MRI evaluation of sacroiliac joints and cervical, thoracic, and lumbar regions of the spine conducted at BL, week 14, and week 104 in patients who meet eligibility criteria. †Interim analysis at week 64 presented here.



Supplemental Figure 3. Percentage of Patients Achieving Patient Global Assessment of Pain ≤1 or ≤2 NRS up to Week 56 in SELECT-PsA 1 and 2. ADA, adalimumab; DMARD, disease-modifying antirheumatic drug; EOW, every other week; NRI, non-responder imputation; NRS, numeric rating scale; QD, once daily; UPA, upadacitinib; W, week. N's for NRI analysis. Green asterisks: statistically significant at 0.05 level for continuous UPA 15 mg vs continuous ADA; purple asterisk: statistically significant at 0.05 level for continuous ADA vs continuous UPA 15 mg. Nominal *P* value for a binary endpoint was constructed using the Cochran-Mantel-Haenszel test adjusting for the main stratification factor of current use of non-biologic DMARD (yes/no). Dashed line: all patients randomized to placebo received blinded UPA starting from week 24.



Supplemental Figure 4. Proportion of Patients with ≥30%, ≥50%, ≥70% Reduction From Baseline, MBI, or MCID in Patient's Assessment of Back Pain Through 64 Weeks in SELECT-AXIS 1. CRP, C-reactive protein; MBI, much better improvement (≥2-point reduction and ≥33% reduction from baseline on a 0–10 NRS); MCID, minimal clinically important difference (≥1-point reduction or ≥15% reduction from baseline on a 0–10 NRS); NRI, non-responder imputation; NRS, numeric rating scale; PBO, placebo; QD, once daily; UPA, upadacitinib; W, week. Dashed line: all patients randomized to placebo received open-label UPA starting from week 14. N's for NRI analysis; UPA vs PBO comparison was calculated using Cochran-Mantel-Haenszel test adjusting for stratification factor of high-sensitivity CRP level. Nominal *P* value above the bracket: UPA 15 mg vs placebo was statistically significant at 0.05 level at each time point up to week 14, except for week 4 for MCID.



Supplemental Figure 5. Percentage of Patients With Ankylosing Spondylitis Achieving Patient Global Assessment of Pain ≤1 or ≤2 NRS up to Week 56 in SELECT-AXIS 1. NRI, non-responder imputation; NRS, numeric rating scale; QD, once daily; UPA, upadacitinib; W, week. Dashed line: all patients randomized to placebo received open-label UPA starting from week 14.