

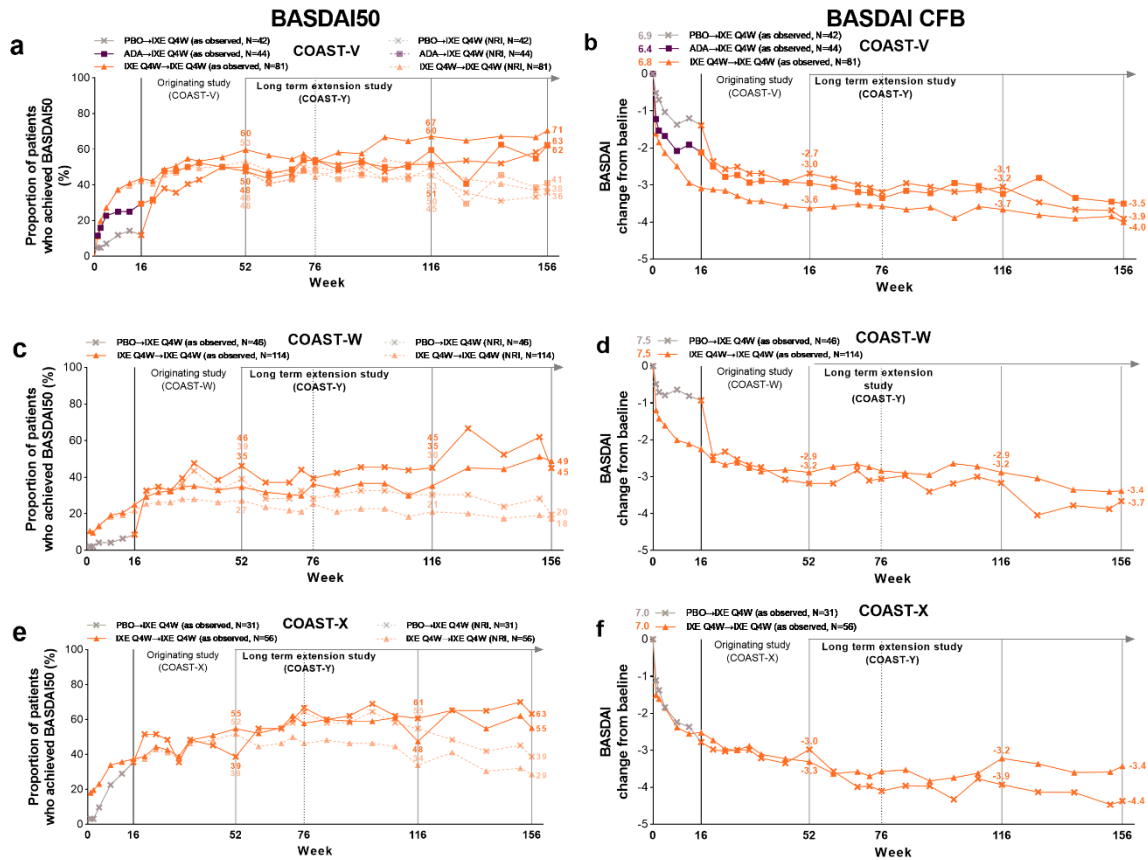
**Supplementary Table S1.** Summary of efficacy outcomes (as observed) at weeks 52, 116, and 156 in patients who received  $\geq 1$  dose of IXE, by originating study.

	COAST-V			COAST-W			COAST-X		
	IXE Q4W→IXE Q4W			IXE Q4W→IXE Q4W			IXE Q4W→IXE Q4W		
	(N=81)			(N=114)			(N=56)		
Week	52	116	156	52	116	156	52	116	156
<b>Response: % (n)</b>									
ASAS20	73.6 (53/72)	76.6 (49/64)	84.1 (37/44)	67.4 (60/89)	64.7 (44/68)	70.7 (29/41)	72.5 (29/40)	73.6 (39/53)	75.9 (22/29)
ASAS40	59.7 (43/72)	67.2 (43/64)	68.2 (30/44)	46.2 (18/39)	50.0 (34/68)	56.1 (23/41)	54.7 (29/53)	55.0 (22/40)	58.6 (17/29)
ASAS PR	30.6 (22/72)	31.3 (20/64)	45.5 (20/44)	14.6 (13/89)	7.4 (5/68)	12.2 (5/41)	32.1 (17/53)	32.5 (13/40)	34.5 (10/29)
ASDAS LDA (<2.1)	59.7 (43/72)	59.4 (38/64)	75.0 (33/44)	31.4 (27/86)	30.9 (21/68)	39.0 (16/41)	54.7 (29/53)	55.0 (22/40)	65.5 (19/29)
ASDAS ID (<1.3)	25.0 (18/72)	23.4 (15/64)	34.1 (15/44)	11.6 (10/86)	8.8 (6/68)	14.6 (6/41)	24.5 (13/53)	27.5 (11/40)	20.7 (6/29)
ASDAS CII ( $\geq 1.1$ CFB)	70.8 (51/72)	70.3 (45/64)	79.5 (35/44)	61.6 (53/86)	66.2 (45/68)	73.2 (30/41)	67.9 (36/53)	62.5 (25/40)	69.0 (20/29)
ASDAS MI ( $\geq 2.0$ CFB)	41.7 (30/72)	42.2 (27/64)	40.9 (18/44)	31.4 (27/86)	25.0 (17/68)	39.0 (16/41)	32.1 (17/53)	32.5 (13/40)	41.4 (12/29)

BASDAI50	59.7 (43/72)	67.2 (43/64)	70.5 (31/44)	34.8 (31/89)	35.3 (24/68)	48.8 (20/41)	54.7 (29/53)	47.5 (19/40)	55.2 (16/29)
<b>Change from baseline: Mean (SD)</b>									
ASDAS	-1.8 (1.1)	-1.8 (1.1)	-1.9 (0.9)	-1.4 (1.1)	-1.5 (1.1)	-1.7 (1.0)	-1.6 (1.1)	-1.6 (1.3)	-1.7 (1.4)
BASDAI	-3.6 (2.3)	-3.7 (2.2)	-4.0 (2.2)	-2.9 (2.3)	-2.9 (2.2)	-3.4 (2.2)	-3.3 (2.4)	-3.2 (2.6)	-3.4 (2.7)
BASDAI inflammation	-3.7 (2.6)	-3.6 (2.4)	-4.1 (2.4)	-2.9 (2.6)	-3.0 (2.4)	-3.5 (2.3)	-3.4 (2.7)	-3.3 (2.7)	-3.2 (3.2)
BASFI	-3.1 (2.3)	-3.3 (2.2)	-3.6 (2.2)	-2.5 (2.5)	-2.4 (2.3)	-2.9 (2.0)	-3.0 (2.7)	-2.8 (3.0)	-3.0 (2.8)
ASAS-HI	-3.0 (3.2)	-2.7 (3.5)	-2.9 (3.5)	-3.0 (3.8)	-3.5 (4.0)	-4.2 (4.0)	-3.4 (3.5)	-3.5 (3.5)	-3.9 (3.6)
SF-36 PCS	9.4 (9.0)	8.6 (8.4)	9.4 (7.7)	8.0 (8.7)	8.7 (7.9)	9.7 (8.3)	9.6 (9.8)	8.4 (11.2)	10.0 (11.3)
SF-36 MCS	2.9 (9.7)	1.4 (9.7)	3.5 (10.4)	4.7 (10.1)	3.9 (10.9)	5.8 (10.8)	5.2 (9.7)	4.3 (10.0)	4.6 (9.4)

Data are presented as % (n) unless otherwise specified. Observed data while on IXE Q2W escalated dose are excluded. Abbreviations: ASAS, Assessment of Spondyloarthritis International Society; ASAS20, 20% improvement in the ASAS; ASAS40, 40% improvement in the ASAS; ASAS-HI, ASAS Health-Index; ASDAS, Ankylosing Spondylitis Disease Activity Score; BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; BASDAI50, improvement of at least 50% in the BASDAI; BASFI, Bath Ankylosing Spondylitis Functional Index; CFB, change from baseline; CII, clinically important improvement; ID, inactive disease; IXE, ixekizumab; LDA, low disease activity; MCS, Mental Component Score; MI, major improvement; PCS, Physical Component Score; PR, partial remission; Q2W, every 2 weeks; Q4W, every 4 weeks; SD, standard deviation; SF-36, Short Form (36) Health Survey

**Supplementary Figure S1.** The proportion of patients achieving BASDAI50 (as observed and NRI) and the CFB (as observed) in BASDAI score through 156 weeks in patients who received  $\geq 1$  dose of IXE Q4W from COAST-V (a-b), COAST-W (c-d), and COAST-X (e-f).



Data are presented as observed (solid line) and NRI (dotted line). Mean baseline values for BASDAI are shown in the figure legends. At week 16, patients receiving either placebo (gray) or adalimumab (purple) were switched to IXE Q4W (orange). ADA→IXE Q4W are patients who were on washout period from weeks 14 to 20 and started the first ixekizumab injection of IXE Q4W on Week 20. Abbreviations: ADA, adalimumab; BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; BASDAI50, improvement of at least 50% in the BASDAI; CFB, change from baseline; IXE, ixekizumab; NRI, non-responder imputation; PBO, placebo; Q4W, every 4 weeks.

**Supplementary Table S2.** Summary of efficacy outcomes (non-responder imputation) at weeks 52, 116, and 156 in patients who received  $\geq 1$  dose of IXE from COAST-V.

COAST-V												
	PBO→IXE Q4W (N=42)			ADA→IXE Q4W (N=44)			IXE Q2W→IXE Q2W (N=83)			IXE Q4W→IXE Q4W (N=81)		
Week	52	116	156	52	116	156	52	116	156	52	116	156
<b>Response, % (n)</b>												
ASAS20	66.7 (28)	61.9 (26)	45.2 (19)	75.0 (33)	65.9 (29)	54.5 (24)	72.3 (60)	65.1 (54)	61.4 (51)	65.4 (53)	60.5 (49)	45.7 (37)
ASAS40	47.6 (20)	47.6 (20)	31.0 (13)	54.5 (24)	47.7 (21)	40.9 (18)	50.6 (42)	50.6 (42)	49.4 (41)	53.1 (43)	53.1 (43)	37.0 (30)
ASDAS LDA (<2.1)	40.5 (17)	42.9 (18)	31.0 (13)	54.5 (24)	52.3 (23)	47.7 (21)	51.8 (43)	45.8 (38)	43.4 (36)	53.1 (43)	46.9 (38)	40.7 (33)
BASDAI50	47.6 (20)	45.2 (19)	35.7 (15)	47.7 (21)	50.0 (22)	40.9 (18)	45.8 (38)	43.4 (36)	39.8 (33)	53.1 (43)	53.1 (43)	38.3 (31)

Data are presented as % (n). Abbreviations: ADA, adalimumab; ASAS, Assessment of Spondyloarthritis International Society; ASAS20, 20% improvement in the ASAS; ASAS40, 40% improvement in the ASAS; ASDAS, Ankylosing Spondylitis Disease Activity Score; BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; BASDAI50, improvement of at least 50% in the BASDAI; IXE, ixekizumab; LDA, low disease activity; PBO, placebo; Q4W, every 4 weeks.

**Supplementary Table S3.** Summary of efficacy outcomes (non-responder imputation) at weeks 52, 116, and 156 in patients who received  $\geq 1$  dose of IXE from COAST-W.

Week	COAST-W								
	PBO→IXE Q4W (N=46)			IXE Q2W→IXE Q2W (N=98)			IXE Q4W→IXE Q4W (N=114)		
	52	116	156	52	116	156	52	116	156
<b>Response, % (n)</b>									
ASAS20	56.5 (26)	37.0 (17)	34.8 (16)	48.0 (47)	52.0 (51)	49.0 (48)	52.6 (60)	38.6 (44)	25.4 (29)
ASAS40	39.1 (18)	32.6 (15)	21.7 (10)	30.6 (30)	34.7 (34)	36.7 (36)	34.2 (39)	29.8 (34)	20.2 (23)
ASDAS LDA ( $<2.1$ )	26.1 (12)	23.9 (11)	15.2 (7)	24.5 (24)	29.6 (29)	22.4 (22)	23.7 (27)	18.4 (21)	14.0 (16)
BASDAI50	39.1 (18)	30.4 (14)	19.6 (9)	27.6 (27)	31.6 (31)	28.6 (28)	27.2 (31)	21.1 (24)	17.5 (20)

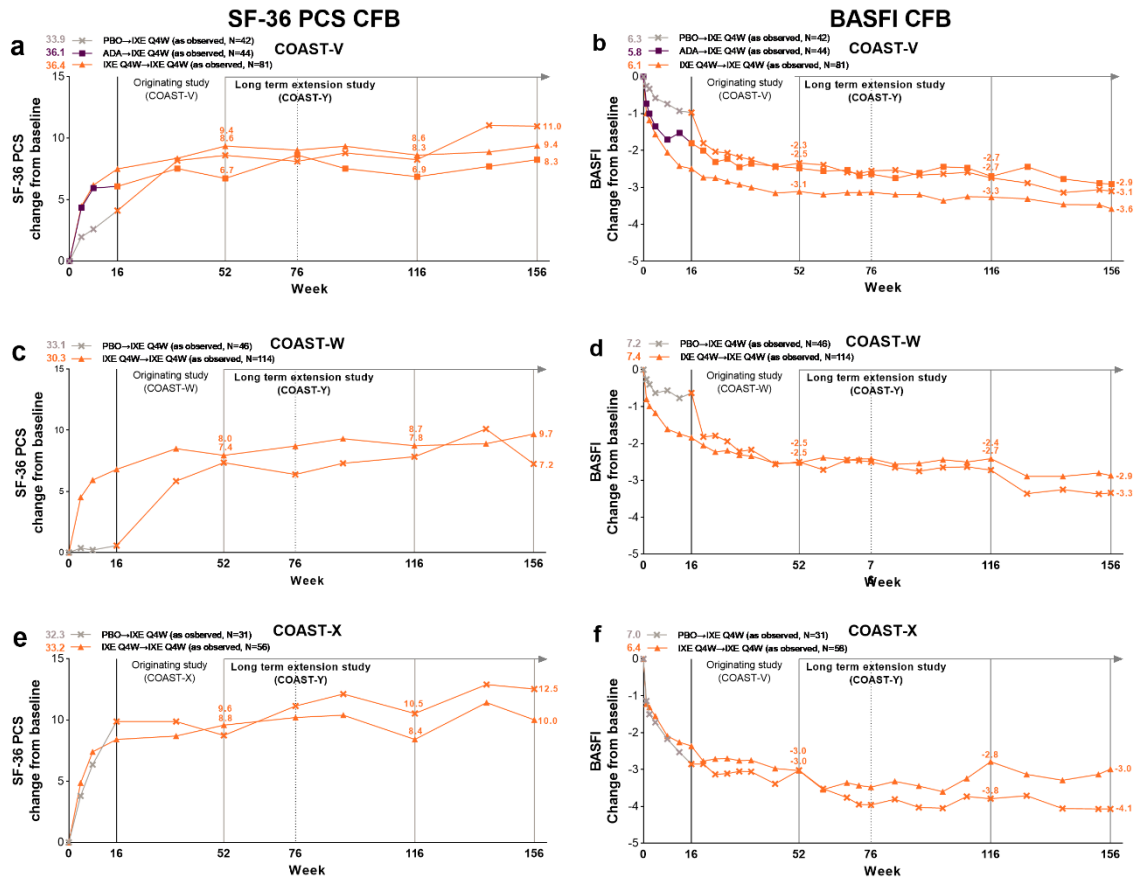
Data are presented as % (n). Abbreviations: ASAS, Assessment of Spondyloarthritis International Society; ASAS20, 20% improvement in the ASAS; ASAS40, 40% improvement in the ASAS; ASDAS, Ankylosing Spondylitis Disease Activity Score; BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; BASDAI50, improvement of at least 50% in the BASDAI; IXE, ixekizumab; LDA, low disease activity; PBO, placebo; Q2W, every 2 weeks; Q4W, every 4 weeks.

**Supplementary Table S4.** Summary of efficacy outcomes (non-responder imputation) at weeks 52, 116 and 156 in patients who received  $\geq 1$  dose of IXE from COAST-X.

COAST-X									
Week	PBO→IXE Q4W (N=31)			IXE Q2W→IXE Q2W (N=102)			IXE Q4W→IXE Q4W (N=56)		
	52	116	156	52	116	156	52	116	156
<b>Response, % (n)</b>									
ASAS20	77.4 (24)	83.9 (26)	54.8 (17)	58.8 (60)	58.8 (60)	53.9 (55)	69.6 (39)	51.8 (29)	39.3 (22)
ASAS40	45.2 (14)	61.3 (19)	48.4 (15)	48.0 (49)	43.1 (44)	46.1 (47)	51.8 (29)	39.3 (22)	30.4 (17)
ASDAS LDA (<2.1)	29.0 (9)	54.8 (17)	41.9 (13)	42.2 (43)	39.2 (40)	38.2 (39)	51.8 (29)	39.3 (22)	33.9 (19)
BASDAI50	38.7 (12)	54.8 (17)	38.7 (12)	37.3 (38)	42.2 (43)	43.1 (44)	51.8 (29)	33.9 (19)	28.6 (16)

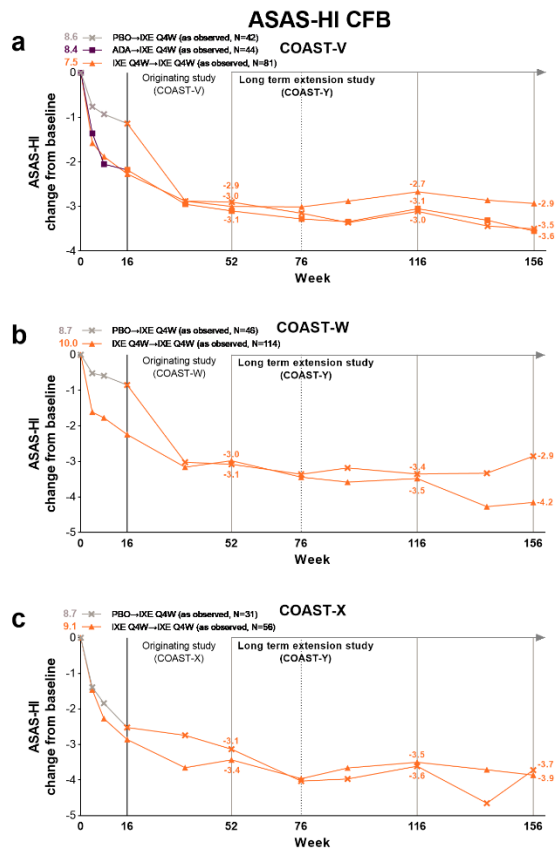
Data are presented as % (n). Abbreviations: ASAS, Assessment of Spondyloarthritis International Society; ASAS20, 20% improvement in the ASAS; ASAS40, 40% improvement in the ASAS; ASDAS, Ankylosing Spondylitis Disease Activity Score; BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; BASDAI50, improvement of at least 50% in the BASDAI; IXE, ixekizumab; LDA, low disease activity; PBO, placebo; Q2W, every 2 weeks; Q4W, every 4 weeks.

**Supplementary Figure S2.** The mean (as observed) CFB in SF-36 PCS and BASFI scores through 156 weeks in patients who received  $\geq 1$  dose of IXE Q4W for patients from COAST-V (a-b), COAST-W (c-d), and COAST-X (e-f).



Mean baseline values for each arm are shown in the legend. At week 16, patients receiving either placebo (gray) or adalimumab (purple) were switched to IXE Q4W (orange). ADA→IXE Q4W are patients who were on washout period from weeks 14 to 20 and started the first ixekizumab injection of IXE Q4W on Week 20. Abbreviations: ADA, adalimumab; BASFI, Bath Ankylosing Spondylitis Functional Index; CFB, change from baseline; IXE, ixekizumab; PBO, placebo; PCS, Physical Component Score; Q4W, every 4 weeks; SF-36, Short Form (36) Health Survey.

**Supplementary Figure S3.** The mean (as observed) CFB in ASAS-HI score through 156 weeks among patients who received  $\geq 1$  dose of IXE Q4W for patients from COAST-V (a), COAST-W (b), and COAST-X (c).



Mean baseline values for ASAS-HI for each arm are shown in the legend. At week 16, patients receiving either placebo (gray) or adalimumab (purple) were switched to IXE Q4W (orange). ADA-IXE Q4W are patients who were on washout period from weeks 14 to 20 and started the first ixekizumab injection of IXE Q4W on Week 20. Abbreviations: ADA, adalimumab; ASAS, Assessment of Spondyloarthritis International Society; ASAS-HI, ASAS Health-Index; CFB, change from baseline; IXE, ixekizumab; PBO, placebo; Q4W, every 4 weeks.