Table SI. Characteristics of included phase 2 and phase 3 trials investigating atopic dermatitis

			Rando-	Mean EASI score	Age of		Concurrent		
Reference	Phase and name of clinical trial	Medication and dose	mized patients,	at beginning, range or mean ± SD	patients, years, range or mean±SD	Control group	topical treatment allowed?	AD severity	Prior treatments/ washout
Beck et al. (14)	Phase II NCT01548404	Dupilumab 300 mg once a week (QW) through week 12	55	EASI: 28.4±1.8	33.7±1.4	Placebo	No	Moderate-to-severe AD defined as an IGA score ≥3 and a SCORAD score >20 or an EASI score >12	Washout period of 4 weeks for the topica investigational agent and 2 weeks for TCS or TCI before the baseline visit.
Simpson et al. (15)	Phase III NCT02277743	SOLO 1: Dupilumab 300 mg QW through week 16	223	EASI: 29.8 (22.0-41.2)	39.0 (27.0- 51.0)	Placebo	No	Moderate-to-severe AD defined as an IGA score >3	Washout period 35- days: systemic therapy
		SOLO 1: Dupilumab 300 mg once every other week (Q2W) through week 16	224	EASI: 30.4 (21.5-40.8)	38.0 (27.5- 48.0)				
		SOLO 2: Dupilumab 300 mg QW through week 16	239	EASI: 29.0 (21.2-41.8)	35.0 (25.0- 46.0)				
		SOLO 2: Dupilumab 300 mg Q2W through week 16	233	EASI: 28.6 (21.0-40.1)	34.0 (25.0- 46.0)				
haçi et al. 16)	Phase IIb NCT01859988	Dupilumab 300 mg QW through week 16.	63	EASI: 30.1± 11.2	36.2 ± 10.7	Placebo	No	Moderate-to-severe AD defined as an EASI score >16 at	Washout period of 1 week for topical therapy And 4 weeks for systemic
		Dupilumab 300 mg Q2W through week 16	64	EASI: 33.8±14.5	39.4 ± 12.1			baseline and an IGA score ≥3	immunosuppressive or immunomodulating
		Dupilumab, 200 mg Q2W through week 16	61	EASI: 32.9±15.5	$35.8\!\pm\!14.9$				therapy.
		Dupilumab 300 mg Q4W through week 16	65	EASI: 29.4±11.5	$36.8\!\pm\!10.8$				
		Dupilumab 100 mg Q4W through week 16	65	EASI: 32.2±13.5	$36.6\!\pm\!11.6$				
Blauvelt et al. 17)	Phase III NCT02260986	Dupilumab 300 mg QW through week 16	319	EASI: 29.0(21.6- 40.7)	34.0(26.0-45.0)	Placebo	Yes		Washout period 6 months: systemic
,		Dupilumab 300 mg Q2W through week 16	106	EASI: 30.9(22.3-41.6)	40.5(28.0-49.0)			score >3 and an EASI score >16	
īsianakas et al. 18)	Phase IIa NCT01548404	Dupilumab 300 mg QW through week 12	32	EASI: 26.4±2.4	37.3±1.8	Placebo	No	Moderate-to-severe AD defined as an IGA score of 3 or 4 and an EASI score >16	Not given.
Veller et al. 19)	Phase III NCT02755649	Dupilumab 300 mg Q2W through week 16	107	EASI: 31.6 (25.2-39.2)	38.0 (25.0- 47.0)	Placebo	Yes	Moderate-to-severe AD defined as an	Washout period of 4 weeks fo
		Dupilumab 300 mg QW through week 16	110	31.1 (24.5-39.0)	38.0 (29.0– 48.0)			EASI score ≥20 and an IGA score ≥3	systemic ciclosporir or phototherapy and azathioprine methotrexate, myco phenolate mofetil o Janus kinase for 8 weeks.
3lauvelt et al. 20)	Phase II NCT02210780	Dupilumab 300 mg once a week (QW) plus single tetanus, diphtheria, pertussis (Tdap) and quadrivalent meningococcal polysaccharide vaccine through week 16	97	EASI: 29±13	39±14	Placebo	Yes	Moderate-to-severe AD defined as IGA score ≥3 and EASI score ≥16	Not given.
Gooderham et al. (26)	Phase IIb NCT02780167	Abrocitinib 10 mg once daily through week 12	49	EASI: 28.1±13.1	$44.3\!\pm\!15.9$	Placebo	No		Washout period of 4 weeks for systematic
, ,		Abrocitinib 30 mg once daily through week 12	51	EASI: 22.1±10.7	$37.6 \!\pm\! 15.9$			score ≥ 3 and an EASI score ≥ 12 .	
		Abrocitinib 100 mg once daily through week 12	56	EASI: 26.7±11.8	$41.1\!\pm\!15.6$				
		Abrocitinib 200 mg once daily through week 12	55	EASI: 24.6±13.5	38.7 ± 17.6				
Guttman- Yassky et al. (27)	Phase II NCT02576938	Baricitinib 2 mg once daily through week 16	37	EASI: 22.1 (16.8-32.3)	42 (26.0-52.0)	Placebo	Yes	Moderate-to-severe AD defined as EASI ≥12.	Not given
		Baricitinib 4 mg once daily through week 16	38	EASI: 19.5 (13.7-25.9)	32.5 (26.0- 48.0)				
Guttman- Yassky et al. (21)	Phase II NCT01979016	Dupilumab 200 mg once weekly through week 16	54	EASI: 30 (18-49)	35 (27–50)	Placebo	No	Moderate-to-severe AD defined as EASI- score ≥16	Washout period 4 weeks: for immuno- suppressant agents and phototherapy and 1 week for TCS and topica calcineurin antagonists
Wollenberg et al. (23)	Phase IIb NCT02347176	Tralokinumab 45 mg Q2W through week 12	50	EASI: 24.8±8.3	39.1 (15.1)	Placebo	Yes	Moderate-to-severe AD defined as an EASI ≥12 and IGA	Washout period 4 weeks: for systemic treatment and TCI.
		Tralokinumab150 mg Q2W through week 12	51	EASI: 27.1±11.2	37.1 (14.0)			score ≥3.	
		Tralokinumab300 mg Q2W through week 12	52	EASI: 27.3±10.9	35.7 (14.6)				

Table SI. (contd)

Reference	Phase and name of clinical trial	Medication and dose	Rando- mized patients, n	Mean EASI score at beginning, range or mean ± SD	Age of patients, years, range or mean ± SD	Control group	Concurrent topical treatment allowed?	AD severity	Prior treatments/ washout
Guttmann- Yassky et al. (28)	Phase IIb NCT02925117	Upadacitinib 7.5 mg once daily through week 16	42	EASI: 31.4±15.8	41.5±15.4	Placebo	No	Moderate-to-severe AD defined as an EASI ≥16 and an IGA	Washout period 4 weeks: for cortico- steroids and systemic
		Upadacitinib 15 mg once daily through week 16	42	EASI: 31.4±12.3	38.5±15.2			score ≥3	therapy and 10 days for TCS.
		Upadacitinib 30 mg once daily through week 16	42	EASI: 28.2±11.6	39.9±15.3				
Reich et al. (29)	Phase III NCT03733301	Baricitinib 2 mg once daily through week 16	109	29.3±11.9	33.8 ± 12.8	Placebo	Yes	Moderate-to-severe AD defined as EASI	Washout period 4 weeks for systemic therapy
		Baricitinib 4 mg once daily through week 16	111	30.9 ± 12.6	33.9 ± 11.4			score ≥16 and an IGA score ≥3	and 2 weeks for topical therapy
Simpson et al. (30)	Phase III NCT03334396	BREEZE AD1: Baricitinib 1 mg once daily through week 16	127	EASI: 29±11.8	36±12.4	Placebo	Yes	Moderate-to-severe AD defined as an EASI score ≥16 and	Wash out period 4 weeks for systemic treatments and 2 weeks
		BREEZE AD1: Baricitinib 2 mg once daily through week 16	123	EASI: 31±11.7	35±13.7			an IGA score ≥3	for topical treatments.
		BREEZE AD1: Baricitinib 4 mg once daily through week 16	125	EASI: 32±12.7	37±12.9				
Simpson et al. (30)	Phase III NCT03334422	BREEZE AD2: Baricitinib 1 mg once daily through week 16	125	EASI: 33±12.7	33 ± 10.0	Placebo	Yes	Moderate-to-severe AD defined as an EASI score ≥16 and an IGA score ≥3	Wash out period 4 weeks for systemic treatments and 2 weeks
		BREEZE AD2: Baricitinib 2 mg once daily through week 16	123	EASI: 35±16.0	$36\!\pm\!13.2$				for topical treatments.
		BREEZE AD2: Baricitinib 4 mg once daily through week 16	123	$33\!\pm\!12.7$	34 ± 14.1				
Bieber et al. (22)	Phase III NCT03720470	Abrocitinib 200 mg once daily through week 12	226	$32.1\!\pm\!13.1$	$38.8 \!\pm\! 14.5$	Placebo	Yes	Moderate-to-severe AD defined as an IGA ≥3 and EASI ≥16	Washout period: 4 weeks for systematic
		Abrocitinib 100 mg once daily through week 12	238	$30.3\!\pm\!13.5$	37.3 ± 14.8				immunosuppressive drugs.
		Dupilumab 300 mg Q2W through week 12	242	$30.4\!\pm\!12.0$	37.1 ± 14.6				
Blauvelt et al. (31)	Phase IIIb NCT03738397	Upadacitinib 30 mg once daily through week 16	348	30.8±12.5	36.6±14.6	Dupilumal 300 mg Q2W	b No	Moderate-to-severe AD defined as IGA ≥3 and EASI ≥16	Washout period: 4 weeks for systemic therapy
Silverberg et al. (24)	Phase III NCT03363854	ECZTRA 3: Tralokinumab 300 mg Q2W through week 16	253	EASI: 24.7 (18.4-35.9)	37.0 (28.0- 52.0)	Placebo	Yes	Moderate-to-severe AD defined as an EASI score ≥12 and IGA score ≥3	Washout period: 4 weeks for systemic immunosuppressive drugs (e.g. methotrexate, cyclosporine, azathioprine, mycophenolate mofetil, Janus kinase inhibitors, and systemic corticosteroid use)
Simpson et al. (30)	Phase III NCT03435081	Baricitinib 1 mg once daily through week 16	147	EASI: 27.7 (11)	40 (17)	Placebo	Yes	Moderate-to-severe AD defined as an	Washout period: 4 weeks for systematic
		Baricitinib 2 mg once daily through week 16	146	EASI: 26.6 (11)	40 (15)			EASI ≥16 and IGA score ≥3	therapies.
Wollenberg et al. (25)	Phase III NCT03131648 and	ECZTRA 1: Tralokinumab 300 mg Q2W through week 16	603	EASI: 28.2 (21.3-40.3)	37.0 (27.0- 48.0)	Placebo	No	Moderate-to-severe AD defined as an EASI ≥12 and IGA	Washout period 4 weeks for systemic treatments and 2 weeks for TCS and
	NCT03160885	ECZTRA 2: Tralokinumab 300 mg Q4W through week 16	593	EASI: 28.2 (19.8-40.8)	34.0 (25.0- 48.0)			score ≥3.	other topical treatments

EASI: Eczema Area and Severity Index; IGA: Investigator Global Assessment; SCORAD: Scoring Atopic Dermatitis; TCS: topical corticosteroids; TCI: topical calcineurin inhibitors. QW: once weekly; Q2W: once every second week; Q4W: once every fourth week; TCS: topical corticosteroids; EASI: Eczema Area And Severity Index.

Table SII. Efficacy outcomes after dupilumab, tralokinumab and JAK-inhibitors treatment in atopic dermatitis patients

Reference	Medication and dose		Proportion achieving EASI-50, %	Proportion achieving EASI-75, %	Proportion achieving EASI-90, %	Proportion achieving IGA 0/1, %	SCORAD reduction, mean, %	DLQI reduction, mean, %	POEM reduction, mean, %	P-percentage of body- surface area affected reduction, mean %	P-numeric rating scale (NRS) reduction mean, %
Beck et al. (14)	Dupilumab 300 mg once a week (QW) through week 12	74.0	85	62	_	40	-	-	-	59.9	55.7
Simpson et al. (15)	SOLO 1: Dupilumab 300 mg once every second week (Q2W) plus TCS through week 16	72.3	69	51	36	38	57.7	9.3	11.6	33.4	51.0
	SOLO 1: Dupilumab 300 mg QW plus TCS through week 16	72.0	61	52	33	37	57.0	9.0	11.0	34.3	48.9
	SOLO 2: Dupilumab 300 mg Q2W plus TCS through week 16	67.1	65	44	30	36	51.1	9.3	10.2	30.6	44.3
	SOLO 2: Dupilumab 300 mg QW plus TCS through week 16	69.1	61	48	31	36	53.5	9.5	11.3	32.1	48.3
Thaçi et al. (16)	Dupilumab 300 mg QW through week 16.	73.7	83	59	36	33	56.9	59.0	-	65.6	46.9
	Dupilumab 300 mg Q2W	68.2	78	51	29	30	51.2	39.6	-	52.1	40.1
	through week 16 Dupilumab, 200 mg Q2W through week 16	65.4	62	55	31	28	46.0	43.3	-	54.5	34.12
	Dupilumab 300 mg Q4W through week 16	63.5	71	49	28	22	48.8	37.4	-	48.8	32.6
	-	44.8	45	29	15	12	26.6	11.9	-	26.2	15.7
Blauvelt et al. (17)	Dupilumab 300 mg plus TCS Q2W plus TCS through week 16	76.7	80	69	40	39	62.1	9.7	12.4	38.6	56.2
	Dupilumab 300 mg QW plus TCS through week 16	77.3	78	64	43	39	63.3	10.5	12.5	37.4	54.8
Tsianakas et al. (18)	Dupilumab 300 mg QW through week 12	79.9	90.6	68.8	-	-	56.9	-	-	-	59.2
Weller et al. (19)	Dupilumab 300 mg plus TCS Q2W through week 16	79.8	85.0	62.6	45.8	40.2	62.4	9.5	11.9	39.2	53.9
	Dupilumab 300 mg plus TCS QW through week 16	78.2	85.5	59.1	37.3	39.1	58.3	8.8	11.4	37.5	51.7
Blauvelt et al. (20)	Dupilumab 300 mg QW plus single tetanus, diphtheria, pertussis (Tdap) and quadrivalent meningococcal polysaccharide vaccine through week 16	-	72.2	53.6	-	44.3	-	-	13.3	30.0	-
Gooderham et al. (26)	Abrocitinib 10 mg once daily through week 12	31.1	26.1	17.4	10.9	10.9	26.7	-	-	7.4	-
,	Abrocitinib 30 mg once daily through week 12	40.7	33.3	13.3	0	8.9	30.1			12.7	
	Abrocitinib 100 mg once daily through week 12 Abrocitinib 200 mg once	59.0 82.6	55.6 79.2	40.7 64.6	25.9 52.1	29.6 43.8	49.2 69.7			20.2	
	daily through week 12									20.0	
Guttman- Yassky et al. (29)	Baricitinib 2 mg once daily through week 16 Baricitinib 4 mg once daily		61	30	19	22	41 47	-	-	-	33 22
	through week 16										
Guttman- Yassky et al. (28)	Dupilumab 200 mg once weekly through week 16	75.2	77.8	66.7	33.3	37	54.8	-	-	-	51.5
Wollenberg et al. (23)	Tralokinumab 45 mg Q2W through week 12	13.67	54	32	-	11.6	-	-	-	-	-
ct di. (23)	Tralokinumab 150 mg Q2W through week 12	15.14	67	43	-	19.5	-	-	-	-	-
	Tralokinumab 300 mg Q2W through week 12	15.72	73	42	_	26.7	-	-	-	-	-
Guttmann- Yassky et	Upadacitinib 7.5 mg once daily through week 16	40	50	29	15	14	-	-	-	11	39
al. (28)	Upadacitinib 15 mg once daily through week 16		71	51	26	31				28	49
	Upadacitinib 30 mg once daily through week 16	75	82	69	49	50				30	70
Reich et al. (29)	through week 16		64	43	17	-	29.9	8	9	_	43
	Baricitinib 4 mg once daily through week 16	6/.2	70	48	24		35.8	9	11		51

Reference	Medication and dose		Proportion achieving EASI-50, %	Proportion achieving EASI-75, %	Proportion achieving EASI-90, %	Proportion achieving IGA 0/1, %	SCORAD reduction, mean, %	DLQI reduction, mean, %	POEM reduction, mean, %	P-percentage of body- surface area affected reduction, mean %	P-numeric rating scale (NRS) reduction mean, %
Simpson et al. (30)	BREEZE AD1: Baricitinib 1 mg once daily through week 16	48.2	Monotherapy: 25.0	Monotherapy: 17.3 With TCS: 28.3	Monotherapy: 8.7 With TCS: 11.8	-	-	4.6	Monotherapy: 5.3	-	31.3
	BREEZE AD1: Baricitinib 2 mg once daily through week 16	51.9	Monotherapy: 30.1		Monotherapy: 10.6 With TCS: 13.8			4.3	Monotherapy: 6.3		29.4
	BREEZE AD1: Baricitinib 4 mg once daily through week 16	59.4	Monotherapy: 41.6	Monotherapy: 24.8 With TCS: 36.0	Monotherapy: 16.0 With TCS: 20.0			6.8	Monotherapy: 7.8		36.6
Simpson et al. (30)	BREEZE AD2: Baricitinib 1 mg once daily through week 16	41.7	Monotherapy: 18.4	Monotherapy: 12.8 With TCS: 28.0	Monotherapy: 6.4 With TCS: 9.6	-	-	5.1	Monotherapy: 3.9	_	31.4
	BREEZE AD2: Baricitinib 2 mg once daily through week 16	54.8	Monotherapy: 27.6	Monotherapy: 17.9 With TCS: 36.6	Monotherapy: 8.9 With TCS: 17.9			7.4	Monotherapy: 7.1		47.2
	BREEZE AD2: Baricitinib 4 mg once daily through week 16	54.9	Monotherapy: 29.3	Monotherapy: 21.1 With TCS: 35.8	Monotherapy: 13.0 With TCS: 22.0			7.6	Monotherapy: 7.6		46.9
Bieber et al. (22)	Abrocitinib 200 mg once daily through week 12	80.6	86.3	70.3	46.1	48.4	44.9	-	12.6	7.0	-
	Abrocitinib 100 mg once daily through week 12	73.8	75.3	58.7	36.6	36.6	36.6		9.6	8.1	
	Dupilumab 300 mg Q2W through week 12	75.4	80.9	58.1	34.9	36.5	39.7		10.8	9.0	
Blauvelt et al. (31)	Upadacitinib 30 mg once daily through week 16	-	-	71	60.6	-	-	-		-	66.9
Silverberg et al. (24)	ECZTRA 3: Tralokinumab 300 mg Q2W plus TCS through week 16	21.0	79.4	56.0	32.9	38.9	37.7	11.7	11.8	-	4.1
Simpson et al. (30)	Baricitinib 1 mg once daily through week 16	46.66	19.7	-	7.5	-	-	5.47	4.57	-	2.18
	Baricitinib 2 mg once daily through week 16	54.37	34.9	-	20.5			7.46	7.44		2.72
Wollenberg et al. (25)	ECZTRA 1: Tralokinumab 300 mg Q2W through week 16	15.5	41.6	25	14.5	15.8	25.2	7.1	7.6	-	-
	ECZTRA 2: Tralokinumab 300 mg Q2W week 16	16.9	49.9	33.2	18.3	22.2	28.1	8.8	8.8	-	-

DLQI: Dermatology Life Quality Index; EASI: Eczema Area and Severity Index; EASI-50: percentage of patients achieving 50% EASI score improvement; EASI-75: percentage of patients achieving 75% EASI score improvement; EASI-90: percentage of patients achieving 90% EASI score improvement; IGA: Investigator Global Assessment; P-NRS: Pruritus Numerical Rating Scale; POEM: Patient-Oriented Eczema Measure; P-VAS: Pruritus Visual Analog Scale; SCORAD: Scoring Atopic Dermatitis; TCS: topical corticosteroid.

Study or Subgroup	Active treat Events		Place Events		Weight	Risk Difference IV, Random, 95% CI	Risk Diffe IV, Random,	
1.1.1 Dupilumab 300 mg QW through week 12								
Beck: Dupllumab 300 mg QW through week 12 Tslanakas: Dupllumab 300 mg QW through week 12 Subtotal (95% CI)	47 29	55 32 87	19 13	54 32 86	5.0% 4.2% 9.2%	0.50 [0.34, 0.66] 0.50 [0.30, 0.70] 0.50 [0.38, 0.63]		-
Total events	76		32			,		
Heterogeneity: $Tau^2 = 0.00$; $Chl^2 = 0.00$, $df = 1$ ($P = 0.98$) Test for overall effect: $Z = 7.97$ ($P < 0.00001$)	i); i² = 0%							
1.1.2 Dupilumab 300 mg QW through week 16	136	223	55	224	6.4%	0.26 (0.28 0.45)		100
Simpson: S1: Dupliumab 300 mg QW through week 16 Simpson: S2: Dupliumab 300 mg QW through week 16	146	239	52		6.5%	0.36 [0.28, 0.45] 0.39 [0.31, 0.47]		-
Thac: Dupllumab 300 mg QW through week 16 Subtotal (95% CI)	52	63 525	18	61 521	5.2% 18.0%	0.53 [0.38, 0.68] 0.41 [0.33, 0.49]		
Total events	334	323	125	321	10.0%	0.41 [0.55, 0.49]		•
Heterogeneity: $Tau^2 = 0.00$; $Chi^2 = 3.70$, $df = 2$ ($P = 0.16$) Test for overall effect: $Z = 10.24$ ($P < 0.00001$)	i); I² = 46%							
1.1.3 Dupilumab 300 mg Q2W through week 16								
SimpsonS1: Dupllumab 300 mg Q2W through week 16 Simpson S2: Dupllumab 300 mg Q2W through week 16	154 152	224 233	55 52	224	6.4%	0.44 [0.36, 0.52] 0.43 [0.35, 0.51]		-
Thacl: Dupllumab 300 mg Q2W through week 16	50	64	18	61	5.1%	0.49 [0.33, 0.64]		_
Subtotal (95% CI) Total events	356	521	125	521	18.0%	0.44 [0.39, 0.50]		•
Heterogeneity: $Tau^2 = 0.00$; $Chl^2 = 0.38$, $df = 2$ ($P = 0.83$ Test for overall effect: $Z = 16.05$ ($P < 0.00001$)								
1.1.4 Dupilumab 200 mg Q2W through week 16								
Thacl: Dupllumab 200 mg Q2W through week 16 Subtotal (95% CI)	38	61 61	18	61 61	4.8%	0.33 [0.16, 0.49] 0.33 [0.16, 0.49]		
Total events	38	0.2	18	-	11070	0.55 [0.10, 0.15]		
Heterogeneity: Not applicable Test for overall effect: Z = 3.85 (P = 0.0001)								
1.1.5 Dupilumab 100 mg Q4W through week 16	24					0 15 1 0 00 0 00°		
Thac: Dupllumab 100 mg Q4W through week 16 Subtotal (95% CI)	29	65 65	18	61 61	4.8%	0.15 [-0.02, 0.32] 0.15 [-0.02, 0.32]	-	-
Total events	29		18					
Heterogeneity: Not applicable Test for overall effect: $Z = 1.78$ (P = 0.08)								
1.1.6 Abrocitinib 10 mg once daily through week 16								
Gooderham: Abrockinib 10 mg once dally week 16 Subtotal (95% CI)	12	46 46	14	52 52	4.6%	-0.01 [-0.18, 0.17] -0.01 [-0.18, 0.17]		
Total events	12		14					
Heterogeneity: Not applicable Test for overall effect: Z = 0.09 (P = 0.93)								
1.1.7 Abrocitinib 30 mg once daily through week 16								
Gooderham: Abrockinib 30 mg once daily week 16 Subtotal (95% CI)	15	45	14	52 52	4.5%	0.06 [-0.12, 0.25] 0.06 [-0.12, 0.25]		_
Total events	15		14	-	11070	0.00 (0.12, 0.25)		
Heterogeneity: Not applicable Test for overall effect: Z = 0.69 (P = 0.49)								
1.1.8 Abrocitinib 100 mg once daily through week 16								
Gooderham: Abrocitinib 100 mg once daily week 16	30	54 54	14	52 52	4.6%	0.29 [0.11, 0.47]		
Subtotal (95% CI) Total events	30	34	14	32	4.6%	0.29 [0.11, 0.47]		
Heterogeneity: Not applicable Test for overall effect: Z = 3.13 (P = 0.002)								
1.1.9 Abrocitinib 200 mg once daily through week 16 Gooderham: Abrocitinib 200 mg once daily week 16	38	48	14	52	4.8%	0.52 [0.36, 0.69]		-
Subtotal (95% CI)		48		52	4.8%	0.52 [0.36, 0.69]		-
Total events Heterogeneity: Not applicable	38		14					
Test for overall effect: $Z = 6.15$ (P < 0.00001)								
1.1.10 Upadacitinib 7.5 mg once daily through week 16		1000			5.00320035	PVA -2000 (0200 0000 P C) 11 Test		
Yassky: Upadacitinib 7.5 mg once daily week 16 Subtotal (95% CI)	21	42	9	41 41	4.2%	0.28 [0.08, 0.48] 0.28 [0.08, 0.48]		
Total events	21		9					
Heterogeneity: Not applicable Test for overall effect: Z = 2.79 (P = 0.005)								
1.1.11 Upadacitinib 15 mg once daily through week 16								
Yassky: Upadacitinib 15 mg once daily week 16	30	42	9	41	4.4%	0.49 [0.31, 0.68]		
Subtotal (95% CI) Total events	30	42	9	41	4.4%	0.49 [0.31, 0.68]		
Heterogeneity: Not applicable Test for overall effect: Z = 5.20 (P < 0.00001)			-					
1.1.12 Upadacitinib 30 mg once daily through week 16								
Yassky: Upadacitinib 30 mg once daily week 16	34	42	9	41	4.7%	0.59 [0.42, 0.76]		
Subtotal (95% CI) Total events	34	42	9	41	4.7%	0.59 [0.42, 0.76]		
Heterogeneity: Not applicable Test for overall effect: Z = 6.66 (P < 0.00001)								
1.1.13 Tralokinumab 300 mg Q2W through week 16								
Wollenberg:Tralokinumab 300mg Q2W through week16	250	601	42		6.7%	0.20 [0.13, 0.27]		+
Wollenberg:Tralokinumab 300 mg Q2W week 16 (EC2) Subtotal (95% CI)	295	591 1192	41	201 398	6.7% 13.3%	0.30 [0.23, 0.36] 0.25 [0.16, 0.34]		•
Total events	545		83					
Heterogeneity: $Tau^2 = 0.00$; $Chi^2 = 3.43$, $df = 1$ ($P = 0.06$) Test for overall effect: $Z = 5.39$ ($P < 0.00001$)	y; r = 71%i							
Total (95% CI)		2770	94,22,100	1979	100.0%	0.36 [0.30, 0.42]		•
Total events Heterogeneity: $Tau^2 = 0.01$; $Chl^2 = 69.77$, $df = 18 (P < 0.01)$	1558 .00001); r² -	- 80%	484				-1 -0.5 0	ale d
Test for overall effect: $Z = 11.27 (P < 0.00001)$			_				-1 -0.5 0 Favours [placebo] Fa	0.5 1 vours [active]
Test for subgroup differences: Chi ² = 67.33, df = 12 (P <	A.0000T)' I	= 62.2)	~		_			

Fig. S1. Results of meta-analysis for Eczema Area and Severity Index (EASI)-50, where patients were not allowed to use topical corticosteroids (TCS). QW: once weekly; Q2W: once every second week; Q4W: once every fourth week; TCS: topical corticosteroids; EASI: Eczema Area And Severity Index.

tudy or Subgroup	Active treat Events		Place Events		Weight	Risk Difference M-H, Random, 95% CI	Risk Difference M-H, Random, 95% CI
.2.1 Dupilumab 300 mg QW through week 12 eck: Dupilumab 300 mg QW through week 12	34	55	8	54	4.8%	0.47 [0.31, 0.63]	
slanakas: Dupilumab 300 mg QW through week 12 ubtotal (95% CI)	22	32 87	13	32 86	3.7% 8.5%	0.28 [0.05, 0.52] 0.40 [0.21, 0.58]	•
otal events leterogeneity: Tau ² = 0.01; Chi ² = 1.73, df = 1 (P = 0.19 lest for overall effect: Z = 4.26 (P < 0.0001)	56 3); 1² = 42%		21				
.2.2 Dupilumab 300 mg QW through week 16 Impson: \$1: Dupilumab 300 mg QW through week 16	117	223	33	224	6.1%	0.38 [0.30, 0.46]	
mpson: \$2: Dupllumab 300 mg QW through week 16	115	239	28	236	6.2%	0.36 [0.29, 0.44]	=
haci: Dupilumab 300 mg QW through week 16 ubtotal (95% CI)	37	63 525	7	61 521	5.1% 17.4%	0.47 [0.33, 0.62] 0.38 [0.33, 0.43]	•
otal events eterogenetty: Tau² = 0.00; Chi² = 1.76, df = 2 (P = 0.42 est for overall effect: Z = 14.56 (P < 0.00001)	269 t); t² = 0%		68				
.2.3 Dupilumab 300 mg Q2W through week 16 Impson\$1: Dupilumab 300 mg Q2W through week 16	***	224	22	224		0.27 10.20 0.451	
mpson \$2: Dupliumab 300 mg Q2W through week 16 mpson \$2: Dupliumab 300 mg Q2W through week 16 haci: Dupliumab 300 mg Q2W through week 16	115 103 33	224	33 28 7	224 236 61	6.1% 6.2%	0.37 [0.29, 0.45] 0.32 [0.25, 0.40]	
ubtotal (95% CI)		64 521		521	5.1% 17.3%	0.40 [0.25, 0.55] 0.35 [0.30, 0.40]	•
otal events eterogeneity: $Tau^2 = 0.00$; $Cht^2 = 1.09$, $df = 2$ ($P = 0.58$ est for overall effect: $Z = 13.32$ ($P < 0.00001$)	251 3); r² = 0%		68				
.2.4 Dupilumab 200 mg Q2W through week 16 hacl: Dupilumab 200 mg Q2W through week 16	33	61	7	61	5.0%	0.43 [0.28, 0.57]	
ubtotal (95% CI) otal events	33	61	7	61	5.0%	0.43 [0.28, 0.57]	•
eterogeneity: Not applicable est for overall effect: Z = 5.63 (P < 0.00001)							
.2.5 Dupilumab 100 mg Q4W through week 16 haci: Dupilumab 100 mg Q4W through week 16	19	65	7	61	5.2%	0.18 [0.04, 0.31]	
ubtotal (95% CI) otal events	19	65	7	61	5.2%	0.18 [0.04, 0.31]	•
eterogeneity: Not applicable est for overall effect: Z = 2.55 (P = 0.01)							
2.6 Abrocitinib 10 mg once daily through week 16 coderham: Abrocitinib 10 mg once dally week 16	8	46	8	52	5.1%	0.02 [-0.13, 0.17]	
ubtotal (95% CI) ptal events	8	46	8	52	5.1%	0.02 [-0.13, 0.17]	•
eterogeneity: Not applicable est for overall effect: Z = 0.27 (P = 0.79)							
.2.7 Abrocitinib 30 mg once daily through week 16							
ooderham: Abrocitinib 30 mg once dally week 16 ubtotal (95% CI)	6	45 45	8	52 52	5.2% 5.2%	-0.02 [-0.16, 0.12] -0.02 [-0.16, 0.12]	•
otal events eterogeneity: Not applicable est for overall effect: Z = 0.29 (P = 0.77)	6		8				
.2.8 Abrocitinib 100 mg once daily through week 16		-					990
ooderham: Abrocitinib 100 mg once daily week 16 ubtotal (95% CI)	22	54 54	8	52 52	4.8%	0.25 [0.09, 0.42] 0.25 [0.09, 0.42]	•
otal events eterogeneity: Not applicable	22		8				
est for overall effect: Z = 3.04 (P = 0.002)							
2.9 Abrocitinib 200 mg once daily through week 16 ooderham: Abrocitinib 200 mg once daily week 16	31	48	8	52	4.7%	0.49 [0.32, 0.66]	
ubtotal (95% CI) otal events	31	48	8	52	4.7%	0.49 [0.32, 0.66]	•
eterogeneity: Not applicable est for overall effect: Z = 5.77 (P < 0.00001)	31		۰				
2.10 Upadacitinib 7.5 mg once daily through week 16 assky: Upadacitinib 7.5 mg once daily week 16	12	42	4	41	4.8%	0.19 [0.02, 0.35]	
ubtotal (95% CI) otal events	12	42	4	41	4.8%	0.19 [0.02, 0.35]	•
eterogeneity: Not applicable est for overall effect: Z = 2.25 (P = 0.02)	12		7				
.2.11 Upadacitinib 15 mg once daily through week 16 assky: Upadacitinib 15 mg once daily week 16	21	42	4	41	4.6%	0.40 [0.23, 0.58]	
ubtotal (95% CI) otal events	21	42	4	41	4.6%	0.40 [0.23, 0.58]	•
eterogeneity: Not applicable est for overall effect: Z = 4.47 (P < 0.00001)							
.2.12 Upadacitinib 30 mg once daily through week 16 assky: Upadacitinib 30 mg once daily week 16	29	42	4	41	4.7%	0.59 [0.43, 0.76]	
ubtotal (95% CI) otal events	29	42	4	41	4.7%	0.59 [0.43, 0.76]	•
eterogeneity: Not applicable est for overall effect: Z = 6.97 (P < 0.00001)			·				
.2.13 Tralokinumab 300 mg Q2W through week 16 follenberg:Tralokinumab 300 mg Q2W through week16	150	601	25	107	6 AW	0.12 [0.06, 0.18]	_
follenberg:Tralokinumab 300 mg Q2W week 16 (EC2)	196	591	25 23	197 201	6.4%	0.22 [0.16, 0.28]	-
ubtotal (95% CI) otal events eterogeneity: Tau² = 0.00; Chi² = 5.10, df = 1 (P = 0.02	346	1192	48	398	12.8%	0.17 [0.08, 0.26]	•
est for overall effect: Z = 3.59 (P = 0.0003)	.,, - 00A						
otal (95% CI) otal events	1103	2770	263	1979	100.0%	0.31 [0.24, 0.37]	•
			-40				

Fig. S2. Results of meta-analysis for Eczema Area and Severity Index (EASI)-75, where patients were not allowed to use topical corticosteroids (TCS). QW: once weekly; Q2W: once every second week; Q4W: once every fourth week; TCS: topical corticosteroids; EASI: Eczema Area And Severity Index.]

13.1 Displainab 100 mg QVW through week 16	**************************************	Active trea		Place		W-!-ba	Risk Difference	V	Risk Difference
Total events 10 2		Events 10							IV, Random, 95% CI
rest for overall effect 2 = 2.1 (P = 0.62) 1.12 Deplimash 300 mg (px through week 16 migroes): Deplimash 300 mg (px through week 16 migroes): Deplimash 300 mg (px through week 16 migroes): 2.1	Fotal events	10	65	2	61	6.0%			•
Imagen of 21. Deplimab 300 mg (per mough week 16									
majence 22: Deplituable 300 mg (0Pt through week 16 73 239 17 236 6.8% 0.23 (0.17, 0.34) 2016		74	223	17	224	6.7%	0.26 IO 19. 0.331	2016	
## provided (19% C) 12	Impson: \$2: Dupllumab 300 mg QW through week 16	73	239	17	236	6.8%	0.23 [0.17, 0.30]	2016	-
set for ownel affects 2 = 11.00 (0 < 0.00001) 3.3 Displimash 300 mg Q2W through week 16	ubtotal (95% CI)								•
mpsond:1: upulmub 300 mg Q2W through week 16 mpsond:2: upulmub 300 mg Q2W through week 16 mesond and the state of the st	eterogeneity: $Tau^2 = 0.00$; $Chl^2 = 1.82$, $df = 2$ (P = 0.4								
mpson 32: Duplimab 300 mg Q2W through week 16 70 233 17 236 6.8K 0.23 01.6, 0.39 2016 week Duplimab 300 mg Q2W through week 16 18 64 2 51 5.5W 0.25 01.3, 0.31 2016 week Duplimab 300 mg Q2W through week 16 18 641 2 61 5.4W 0.28 [0.15, 0.40] 2016 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 biotical (95% C) 1 61 5.4W 0.28 [0.15, 0.40] 2019 b		80	224	17	224	6.7%	0.28 (0.21, 0.35)	2016	_
### property Fixal* = 0.00; Coh* = 1.11; df = 2 (P = 0.57); F* = 0% and everts and everts are recognitely Fixal* = 0.00; Coh* = 1.11; df = 2 (P = 0.57); F* = 0% and everts are overall effect Z = 0.00 (P < 0.00001) ### property Fixal* = 0.00; Coh* = 1.11; df = 2 (P = 0.57); F* = 0% and everts are overall effect Z = 0.00 (P < 0.00001) ### property Fixal* = 0.00; Coh* = 0.62; df = 1 (P = 0.45); F* = 0% and everts are overall effect Z = 0.00; Coh* = 0.62; df = 1 (P = 0.45); F* = 0% and everts are overall effect Z = 0.00; Coh* = 0.62; df = 1 (P = 0.45); F* = 0% and everts are overall effect Z = 0.00; Coh* = 0.62; df = 1 (P = 0.45); F* = 0% and everts are overall effect Z = 0.00; Coh* = 0.62; df = 1 (P = 0.45); F* = 0% and everts are overall effect Z = 0.00; Coh* = 0.62; df = 1 (P = 0.45); F* = 0% and everts are overall effect Z = 0.00; Coh* = 0.62; df = 1 (P = 0.45); F* = 0% and everts are overall effect Z = 0.00; Coh* = 0.62; df = 1 (P = 0.45); F* = 0% and everts are overall effect Z = 0.00; Coh* = 0.62; df = 0.00; Coh*	mpson S2: Dupilumab 300 mg Q2W through week 16	70	233	17	236	6.8%	0.23 [0.16, 0.30]	2016	<u>+</u>
### stropersety: Fau* = 0.00; Ch* = 0.00;	btotal (95% CI)							2010	•
auch Duplimab 200 mg Q2W through week 16	terogeneity: $Tau^2 = 0.00$; $Cht^2 = 1.11$, $df = 2$ (P = 0.5)			36					
Interial (19% C)		10	£4	•	21	E 48/	0.28 (0.15 0.40)	2015	
Strongeries Not applicable Stro	ibtotal (95% CI)							5010	•
Delicherg Talckinumb 300 mg Q2W through week 16 (EC2)	eterogeneity: Not applicable	19		2					
				_	40-	T 05'	0.10 10.00 0.1.1	2021	
tal events 195 19 19 118 119 118 119 118 119 118 118 1	ollenberg:Tralokinumab 300 mg Q2W week 16 (EC2)		591		201	7.2%	0.13 [0.08, 0.17]		+
at for overall effect Z = 7.64 (P < 0.00001) 3.6 Abrorithib 10 mg once daily through week 16 oderham: Abrorithib 10 mg once daily week 16 oderham: Abrorithib 10 mg once daily week 16 oderham: Abrorithib 30 mg once daily through week 16 oderham: Abrorithib 30 mg once daily through week 16 ototal (95% Cf) at levers 1.7 Abrorithib 30 mg once daily through week 16 ototal (95% Cf) at levers 1.8 Abrorithib 30 mg once daily through week 16 ototal (95% Cf) at levers 1.9 Abrorithib 20 mg once daily week 16 oderham: Abrorithib 100 mg once daily week 16 oderham: Abrorithib 100 mg once daily week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily through week 16 oderham: Abrorithib 200 mg once daily week 16 o		195	1192	19	398	14.5%	0.11 [0.09, 0.14]		•
oderham: Abrocthinib 10 mg once daily week 16 to total (95% C) tal evens to to reverse the control of the contr		3); r² = 0%							
bitotal (95% Cf)		5	46	5	52	5.5%	0.01 [-0.11, 0.13]	2019	
Intercognetity Not applicable Store overall effect: Z = 0.20 (P = 0.84)	btotal (95% CI)								*
Society Soci	terogeneity: Not applicable								
bitotal (95% C)		•	45		E2	E 24	_0.10 [_0.18 _0.01]	2010	
Interogeneity: Not applicable story over all effect: Z = 2.16 (P = 0.03)	btotal (95% CI)							2015	•
oderham: Abrochtinib 100 mg once daily week 16 total (95% C) tal events 14 55 52 5.0% 0.16 [0.02, 0.30] 14 55 52 5.0% 0.16 [0.02, 0.30] 15 16 [0.02, 0.30] 16 [0.02, 0.30] 17 18 18 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	terogeneity: Not applicable	v		,					
Section Sect		14	54	5	52	5.0%	0.16 (0.02.0.30)	2019	
terogenelty. Not applicable st for overall effect. Z = 2.26 (P = 0.02) 3.9 Abrocitinib 200 mg once daily through week 16 soderham: Abrocitinib 200 mg once daily week 16 soderham: Abrocitinib 20 mg once daily week 16 soderham: Abrocitinib 2.5 mg once daily through week 16 soderham: Abrocitinib 2.5 mg o	btotal (95% CI)							2015	•
Solution	terogeneity: Not applicable	14		,					
bitotal (95% CI)		21	AR	5	52	45%	0.34 (0.18.0.50)	2019	
terogeneity: Not applicable st for overall effect: Z = 4.14 (P < 0.0001) 3.10 Upadacitinib 7.5 mg once daily through week 16 sasky: Upadacitinib 7.5 mg once daily week 16 deterogeneity: Not applicable st for overall effect: Z = 2.00 (P = 0.05) 3.11 Upadacitinib 15 mg once daily through week 16 sasky: Upadacitinib 15 mg once daily week 16 deterogeneity: Not applicable st for overall effect: Z = 2.00 (P = 0.05) 3.12 Upadacitinib 15 mg once daily week 16 deterogeneity: Not applicable st for overall effect: Z = 3.30 (P = 0.0010) 3.12 Upadacitinib 30 mg once daily through week 16 sasky: Upadacitinib 30 mg once daily week 16 sasky: Upadacitinib 30 mg once daily through week 16 sasky: Upadacitinib 30 mg once daily through week 16 sasky: Upadacitinib 30 mg once daily through week 16 sasky: Upadacitinib 30 mg once daily through week 16 sasky: U	btotal (95% CI)							-010	•
ssky: Upadactitnib 7.5 mg once daily week 16	terogeneity: Not applicable	21		,					
betotal (95% CI)							A 12 M AA A	2022	
terogenelty: Not applicable st for overall effect: Z = 2.00 (P = 0.05) 3.11 Upadacitinib 15 mg once daily through week 16 saky: Upadacitinib 15 mg once daily week 16 11 42 1 41 5.0% 0.24 [0.10, 0.38] 2020 total events 11 1 1 terogenelty: Not applicable st for overall effect: Z = 3.30 (P = 0.0010) 3.12 Upadacitinib 30 mg once daily through week 16 saky: Upadacitinib 30 mg once daily week 16 20 42 1 41 4.6% 0.45 [0.29, 0.61] 2020 total events 20 1 terogenelty: Not applicable st for overall effect: Z = 5.60 (P < 0.00001) tail events 20 1 terogenelty: Not applicable st for overall effect: Z = 5.60 (P < 0.00001) tail events 20 1 terogenelty: Not applicable st for overall effect: Z = 5.60 (P < 0.00001) tail events 639 118	btotal (95% CI)				41			2020	•
ssky: Upadacitinib 15 mg once dally week 16 11 42 1 41 5.0% 0.24 [0.10, 0.38] 2020 btotal (95% CI) 1 1 1 terogeneity: Not applicable st for overall effect: Z = 3.30 (P = 0.0010)	terogeneity: Not applicable	6		1					
brotal (95% CI) 42 41 5.0% 0.24 [0.10, 0.38] tal events 11 1 troopenelty: Not applicable st for overall effect: Z = 3.30 (P = 0.0010) 8.12 Upadacitinib 30 mg once daily through week 16 ssky: Upadacitinib 30 mg once daily week 16 42 41 4.6% 0.45 [0.29, 0.61] 2020 botal (95% CI) 42 41 4.6% 0.45 [0.29, 0.61] tal events 20 1 terogenelty: Not applicable st for overall effect: Z = 5.60 (P < 0.00001) tal (95% CI) 2683 1893 100.0% 0.19 [0.14, 0.25] tal events 639 118			42	1	41	E VIN	0.24 [0.10.0.29]	2020	
sterogeneity: Not applicable st for overall effect: Z = 3.30 (P = 0.0010) 3.12 Upadacitinib 30 mg once daily through week 16 sasky: Upadacitinib 30 mg once daily week 16 20 42 1 41 4.6% 0.45 [0.29, 0.61] 2020 btotal (95% Cl) 42 41 4.6% 0.45 [0.29, 0.61] 2020 ctal events 20 1 treerogeneity: Not applicable st for overall effect: Z = 5.60 (P < 0.00001) ctal (95% Cl) 2683 1893 100.0% 0.19 [0.14, 0.25] ctal (95% Cl) 2683 1893 100.0% 0.19 [0.14, 0.25] ctal events 639 118	btotal (95% CI)							-0-0	•
ssky: Upadacitinib 30 mg once daily week 16 20 42 1 41 4.6% 0.45 [0.29, 0.61] 2020 btotal (95% Cl) 42 41 4.6% 0.45 [0.29, 0.61] 2020 total (95% Cl) 42 41 4.6% 0.45 [0.29, 0.61] 2020 tetral events 20 1 tetrogeneity: Not applicable st for overall effect: Z = 5.60 (P < 0.00001) tal (95% Cl) 2683 1893 100.0% 0.19 [0.14, 0.25] tal events 639 118	terogeneity: Not applicable	11		1					
btotal (95% CI) 42 41 4.6% 0.45 [0.29, 0.61] tal events 20 1 terogeneity: Not applicable st for overall effect: Z = 5.60 (P < 0.00001) tal (95% CI) 2683 1893 100.0% 0.19 [0.14, 0.25] tal events 639 118			42	•	41	4 EW	0.45 (0.20 0.61)	2020	
terogeneity: Not applicable st for overall effect: Z = 5.60 (P < 0.00001) otal (95% CI) 2683 1893 100.0% 0.19 [0.14, 0.25] tal events 639 118	btotal (95% CI)				41		0.45 [0.29, 0.61]	-0-0	•
tal events 639 116	terogeneity: Not applicable	20		1					
			2683		1893	100.0%	0.19 [0.14, 0.25]		•
eterogeneity: Tau" = 0.01; Chi" = 107.44, df = 16 (P < 0.00001); i" = 85% est for overall effect: Z = 7.12 (P < 0.00001) Easy our [Placehol Favours (Arthur)]	eterogeneity: $Tau^2 = 0.01$; $Chl^2 = 107.44$, $df = 16$ (P <		r² = 85%	118				-	1 -05 0 0-5

 $Fig.\,S3.\,Results\,of\,meta-analysis\,for\,Eczema\,Area\,and\,Severity\,Index\,(EASI)-90,\\ where\,patients\,were\,not\,allowed\,to\,use\,topical\,Area\,and\,Severity\,Index\,(EASI)-90,\\ where\,patients\,were\,not\,allowed\,to\,use\,topical\,Area\,and\,Severity\,Index\,(EASI)-90,\\ where\,patients\,were\,not\,allowed\,to\,use\,topical\,Area\,and\,Severity\,Index\,(EASI)-90,\\ where\,patients\,were\,not\,allowed\,to\,use\,topical\,Area\,and\,Severity\,Index\,(EASI)-90,\\ where\,patients\,were\,not\,allowed\,to\,use\,topical\,Area\,and\,Severity\,Index\,(EASI)-90,\\ where\,patients\,were\,not\,allowed\,to\,use\,topical\,Area\,and\,Severity\,Index\,(EASI)-90,\\ where\,patients\,were\,not\,allowed\,to\,use\,topical\,Area\,and\,Severity\,Index\,(EASI)-90,\\ where\,patients\,were\,not\,Area\,and\,Severity\,Index\,(EASI)-90,\\ wh$ corticosteroids (TCS). QW: once weekly; Q2W: once every second week; Q4W: once every fourth week; TCS: topical corticosteroids; EASI: Eczema Area And Severity Index.

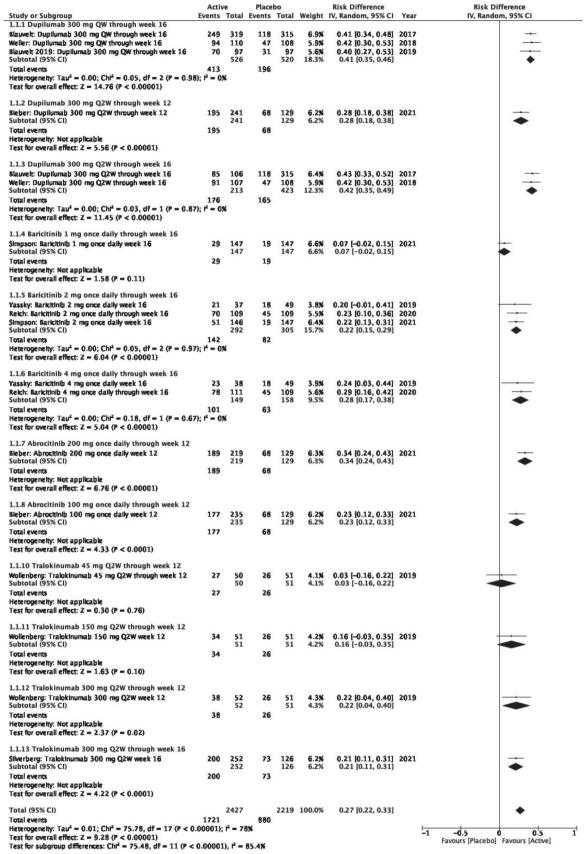


Fig. S4. Results of meta-analysis for Eczema Area and Severity Index (EASI)-50, where patients were allowed to use topical corticosteroids (TCS). QW: once weekly; Q2W: once every second week; Q4W: once every fourth week; TCS: topical corticosteroids; EASI: Eczema Area And Severity Index.

tudy or Subgroup .2.1 Dupilumab 300 mg QW through week 16	Events	re Total	Place Events		Weight	Risk Difference IV, Random, 95% CI	Year	IV, Random, 95% CI
lauvelt: Dupillumab 300 mg QW through week 16 feller: Dupillumab 300 mg QW through week 16 lauvelt 2019: Dupillumab 300 mg QW through week 16 ubtotal (95% CI)	204 65 52	319 110 97 526	73 32 19	315 108 97 520	5.4% 4.4% 4.4% 14.3%	0.41 [0.34, 0.48] 0.29 [0.17, 0.42] 0.34 [0.21, 0.47] 0.37 [0.30, 0.43]	2018	-
otal events eterogeneity: $Tau^2 = 0.00$; $Chl^2 = 2.68$, $df = 2 (P = 0.26]$ est for overall effect: $Z = 10.50 (P < 0.00001)$	321); r² = 2	5%	124					
.2.2 Dupilumab 300 mg Q2W through week 12 leber: Dupilumab 300 mg Q2W through week 12 ubtotal (95% CI) otal events	140 140	241 241	35 35	129 129	4.9% 4.9%	0.31 [0.21, 0.41] 0.31 [0.21, 0.41]	2021	•
eterogeneity: Not applicable est for overall effect: Z = 6.14 (P < 0.00001)								
2.3 Dupilumab 300 mg Q2W through week 16 lauvelt: Dupilumab 300 mg Q2W through week 16 leller: Dupilumab 300 mg Q2W through week 16 ubtotal (95% Cl) otal events letterogeneity: Tau ² = 0.00; Ch ² = 2.41, df = 1 (P = 0.12) letterogeneity: Tau ² = 0.00; Ch ² = 2.41, df = 1 (P = 0.12)	73 67 140); P = 5	106 107 213	73 32 105	315 108 423	4.9% 4.4% 9.4%	0.46 [0.36, 0.56] 0.33 [0.20, 0.46] 0.40 [0.28, 0.52]		-
est for overall effect: Z = 6.32 (P < 0.00001) 2.4 Baricitinib 1 mg once daily through week 16 impson2020a:AD1:Baricitinib 1 mg once daily week16 impson2020b:AD2:Baricitinib 1 mg once daily week16 ubtotal (95% CI) otal events	36 35 71	125 125 250	49 46 95	244 244 488	5.0% 5.0% 10.0%	0.09 [-0.01, 0.18] 0.09 [-0.00, 0.18] 0.09 [0.02, 0.16]		•
eterogeneity: $Tau^2 = 0.00$; $Chi^2 = 0.00$, $df = 1$ ($P = 0.95$) lest for overall effect: $Z = 2.65$ ($P = 0.008$)		×	95					
.2.5 Baricitinib 2 mg once daily through week 16 assky: Baricitinib 2 mg once daily week 16 etch: Baricitinib 2 mg once daily through week 16 impson2020a:AD1:Baricitinib 2 mg once daily week16 impson2020b:AD2:Baricitinib 2 mg once daily week16 impson2020b:AD2:Baricitinib 2 mg once daily week16 ubtotal (95% CI) otal events eterogenety: Tau² = 0.00; Chi² = 1.57, df = 3 (P = 0.67) est for overall effect: Z = 5.36 (P < 0.00001)	11 47 40 45 143); r² = 0	37 109 123 123 392	10 25 49 46 130	49 109 244 244 646	3.4% 4.5% 5.0% 4.9% 17.8%	0.09 [-0.09, 0.28] 0.20 [0.08, 0.32] 0.12 [0.03, 0.22] 0.18 [0.08, 0.28] 0.16 [0.10, 0.21]	2020 2020	•
2.6 Baricitinib 4 mg once daily through week 16 tasky: Baricitinib 4 mg once daily week 16 teich: Baricitinib 4 mg once daily through week 16 mgson2020±AD1: Baricitinib 4 mg once daily week16 mgson2020±AD2: Baricitinib 4 mg once daily week16 ubtotal (95% CI) total events tetrogenelty: Tau² = 0.00; Chì² = 1.52, df = 3 (P = 0.68) set for overall effect: Z = 6.22 (P < 0.00001)	13 53 45 44 155); r² = 0	38 111 123 123 395	10 25 49 46	49 109 244 244 646	3.4% 4.5% 4.9% 4.9% 17.7%	0.14 [-0.05, 0.33] 0.25 [0.13, 0.37] 0.17 [0.07, 0.26] 0.17 [0.07, 0.27] 0.18 [0.12, 0.24]	2020 2020	•
2.7 Abrocitinib 200 mg once daily through week 12 eber: Abrocitinib 200 mg once daily week 12 libiotal (95% CI) stal events sterogeneity: Not applicable set for overall effect: Z = 8.66 (9 < 0.00001)	154 154	219 219	35 35	129 129	4.9% 4.9%	0.43 [0.33, 0.53] 0.43 [0.33, 0.53]	2021	•
2.8 Abrocitinib 100 mg once daily through week 12 eber: Abrocitinib 100 mg once daily week 12 ubtotal (95% CI) tal events etterogeneity: Not applicable est for overall effect: Z = 6.24 (P < 0.00001)	138 138	235 235	35 35	129 129	4.9% 4.9%	0.32 [0.22, 0.42] 0.32 [0.22, 0.42]	2021	•
2.10 Tralokinumab 45 mg Q2W through week 12 ollenberg: Tralokinumab 45 mg Q2W through week 12 thotal (95% CI) stal events sterogeneity: Not applicable st for overall effect: Z = 1.96 (P = 0.05)	16 16	50 50	8	51 51	3.8% 3.8%	0.16 [-0.00, 0.33] 0.16 [-0.00, 0.33]	2019	•
2.11 Tralokinumab 150 mg Q2W through week 12 ollenberg: Tralokinumab 150 mg Q2W week 12 btotal (95% C1) tal events sterogenetly: Not applicable st for overall effect: Z = 3.19 (? = 0.001)	22	51 51	8	51 51	3.7% 3.7%	0.27 [0.11, 0.44] 0.27 [0.11, 0.44]	2019	•
2.12 Tralokinumab 300 mg Q2W through week 12 ollenberg: Tralokinumab 300 mg Q2W week 12 ubtotal (95% Cl) otal events eterogeneity. Not applicable eterogeneity. Not applicable est for overall effect: Z = 3.12 (P = 0.002)	22	52 52	8	51 51	3.7% 3.7%	0.27 [0.10, 0.43] 0.27 [0.10, 0.43]	2019	•
2.13 Tralokinumab 300 mg Q2W through week 16 werberg: Tralokinumab 300 mg Q2W week 16 ubtotal (95% CI) tal events etterogenelty: Not applicable est for overall effect: Z = 3.82 (P = 0.0001)	141 141	252 252	45 45	126 126	4.8% 4.8%	0.20 [0.10, 0.31] 0.20 [0.10, 0.31]	2021	•
otal (95% CI) tal (95% CI) tal events eterogeneity: Tau* = 0.01; Chi* = 99.66, df = 21 (P < 0.0000000000000000000000000000000000	1463 00001);	2876 1 ² = 79	758 %	3389	100.0%	0.24 [0.19, 0.30]	!	+ -1 -d.5 0 0.5

Fig. S5. Results of meta-analysis for Eczema Area and Severity Index (EASI)-75, where patients were allowed to use topical corticosteroids (TCS). QW: once weekly; Q2W: once every second week; Q4W: once every fourth week; TCS: topical corticosteroids; EASI: Eczema Area And Severity Index.

tudy or Subgroup	Activ		Place		Weight	Risk Difference IV, Random, 95% CI	Vear	Risk Difference IV, Random, 95% CI
.3.1 Dupilumab 300 mg QW through week 16	Events	iotai	Events	iotal	weight	iv, Railuolli, 93% Cl	rear	iv, Kandom, 95% Ci
lauvelt: Dupilumab 300 mg QW through week 16	138	319	35	315	6.1%	0.32 [0.26, 0.39]	2017	-
eller: Dupilumab 300 mg QW through week 16	41	110	13	108	5.2%	0.25 [0.14, 0.36]		
ubtotal (95% CI)	3300000 Feb 44	429		423	11.3%	0.30 [0.24, 0.36]		•
otal events	179		48					
eterogeneity: $Tau^2 = 0.00$; $Chl^2 = 1.14$, $df = 1$ ($P = 0$ est for overall effect: $Z = 9.63$ ($P < 0.00001$)	.29); ۴ = 1	12%						
.3.2 Dupilumab 300 mg Q2W through week 12								. 1000
leber: Dupilumab 300 mg Q2W through week 12 ubtotal (95% CI)	84	241 241	13	129 129	5.8% 5.8%	0.25 [0.17, 0.33] 0.25 [0.17, 0.33]	2021	
otal events	84	241	13	129	3.070	0.23 [0.17, 0.33]		
eterogeneity: Not applicable est for overall effect: Z = 6.11 (P < 0.00001)	04		1,0					
.3.3 Dupilumab 300 mg Q2W through week 16								
lauvelt: Dupllumab 300 mg Q2W through week 16	42	106	35	315	5.4%	0.29 [0.19, 0.38]		-
feller: Dupllumab 300 mg Q2W through week 16	49	107 213	13	108 423	5.1%	0.34 [0.22, 0.45]	2018	
ubtotal (95% CI) otal events	91	213	48	723	10.5%	0.31 [0.23, 0.38]		-
otal events eterogeneity: Tau² = 0.00; Cht² = 0.47, df = 1 (P = 0	market and a second	0%	40					
est for overall effect: Z = 8.10 (P < 0.00001)		·/=						
3.4 Baricitinib 1 mg once daily through week 16	dojest	20000		1000000	<u>J</u> ergesti		02429414	
mpson2020a:AD1:Baricitinib 1mg once daily week16	15	125	17	244	6.0%	0.05 [-0.01, 0.12]		 -
mpson2020b:AD2:Baricitinib 1mg once daily week16 ubtotal (95% CI)	12	125 250	16	244 488	6.1% 12.2%	0.03 [-0.03, 0.09] 0.04 [-0.00, 0.08]	2020	T
otal events	27	230	33	700	12.270	J.U4 [-J.UU, U.U8]		
otal events eterogeneity: Tau² = 0.00; Cht² = 0.19, df = 1 (P = 0		0%	33					
est for overall effect: Z = 1.75 (P = 0.08)	-24/11 - 1	-/-						
3.5 Baricitinib 2 mg once daily through week 16	1000	_	19274	200	e a la constant			gippin.
assky: Baricitinib 2 mg once daily week 16	. 7	37	3	49	4.5%	0.13 [-0.01, 0.27]		-
mpson2020a:AD1:Baricitinib 2mg once daily week16	17 22	123 123	17	244	6.0%	0.07 [-0.00, 0.14]		
mpson2020b:AD2:Baricitinib 2mg once daily week16 sich: Baricitinib 2 mg once daily through week 16	18	109	16 15	244 109	5.9% 5.5%	0.11 [0.04, 0.19] 0.03 [-0.07, 0.12]		
ibtotal (95% CI)	10	392	13	646	21.9%	0.08 [0.04, 0.12]	-4-4	•
otal events	64		51					[*
eterogeneity: $Tau^2 = 0.00$; $Chl^2 = 2.48$, $df = 3$ (P = 0 est for overall effect: Z = 3.69 (P = 0.0002)	.48); t² = (0%						
3.6 Baricitinib 4 mg once daily through week 16								
assky: Baricitinib 4 mg once daily week 16	8	38	3	49	4.4%	0.15 [0.00, 0.30]		-
impson2020b:AD2:Baricitinib 4mg once daily week16	27	123	16	244	5.8%	0.15 [0.07, 0.23]		
Impson2020a:AD1:Baricitinib 4mg once daily week16	25 27	123 111	17 15	109	5.8%	0.13 [0.06, 0.21]		
eich: Baricitinib 4 mg once dally through week 16 ubtotal (95% CI)	21	395	13	646	5.3% 21.4%	0.11 [0.00, 0.21] 0.14 [0.09, 0.18]	2020	•
otal events	87		51	540		5.2. [5.05, 6.10]		•
eterogeneity: $Tau^2 = 0.00$; $Chl^2 = 0.57$, $df = 3$ ($P = 0$ est for overall effect: $Z = 5.76$ ($P < 0.00001$)		0%	-					
3.7 Abrocitinib 200 mg once daily through week 1	2							
eber: Abrocitinib 200 mg once daily week 12	101		13		5.7%	0.36 [0.28, 0.44]	2021	
ibtotal (95% CI)	10.20-00.0	219	0.3.20	129	5.7%	0.36 [0.28, 0.44]		•
otal events eterogeneity: Not applicable est for overall effect: Z = 8.41 (P < 0.00001)	101		13					
3.8 Abrocitinib 100 mg once daily through week 1								
eber: Abrocitinib 100 mg once daily week 12 ubtotal (95% CI)	86	235 235	13	129 129	5.8% 5.8%	0.27 [0.18, 0.35] 0.27 [0.18, 0.35]	2021	
	86	233	13	129	3.0%	0.27 [0.10, 0.33]		_
otal events eterogeneity: Not applicable	00		13					
est for overall effect: Z = 6.45 (P < 0.00001)								
3.13 Tralokinumab 300 mg Q2W through week 16								
verberg: Tralokinumab 300 mg Q2W week 16	83	252	27	126	5.5%	0.12 [0.02, 0.21]	2021	-
ibtotal (95% CI)		252		126	5.5%	0.12 [0.02, 0.21]		•
otal events	83		27					
eterogeneity: Not applicable est for overall effect: Z = 2.45 (P = 0.01)								
otal (95% CI)		2626		3139	100.0%	0.17 [0.12, 0.23]		•
otal events	802		297			,,		
		11. 12 _	137711117731177				-	
eterogeneity: Tau2 = 0.01; Chi2 = 122.41, df = 17 (P	< 0.0000	17, I —	0.04/4					1 -0.5 0 0.5

Fig. S6. Results of meta-analysis for Eczema Area and Severity Index (EASI)-90, where patients were allowed to use topical corticosteroids (TCS). QW: once weekly; Q2W: once every second week; Q4W: once every fourth week; TCS: topical corticosteroids; EASI: Eczema Area And Severity Index.