

Dupilumab Lab Safety in Adolescents with Atopic Dermatitis

**Electronic supplementary material**

**Effect of Dupilumab on Laboratory Parameters in Adolescents with Atopic Dermatitis: Results from a Randomized Placebo-Controlled Phase 3 Clinical Trial**

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**Supplemental Table S1** Baseline demographics

	Placebo ( <i>n</i> = 85)	Dupilumab 300 mg q4w ( <i>n</i> = 84)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)
Age, mean (SD), year	14.5 (1.8)	14.4 (1.6)	14.5 (1.7)
Age group, year			
≥ 12 to < 15	41 (48.2)	45 (53.6)	43 (52.4)
≥ 15 to < 18	44 (51.8)	39 (46.4)	39 (47.6)
Male	53 (62.4)	52 (61.9)	43 (52.4)
Ethnicity			
Not Hispanic or Latino	72 (84.7)	64 (76.2)	69 (84.1)
Hispanic or Latino	13 (15.3)	20 (23.8)	13 (15.9)
Race			
White	48 (56.5)	55 (65.5)	54 (65.9)
Black or African American	15 (17.6)	8 (9.5)	7 (8.5)
Asian	13 (15.3)	13 (15.5)	12 (14.6)
Weight, mean (SD), kg	64.4 (21.5)	65.8 (20.1)	65.6 (24.5)
Weight group			
< 60 kg	43 (50.6)	42 (50.0)	43 (52.4)
≥ 60 kg	42 (49.4)	42 (50.0)	39 (47.6)
BMI, mean (SD), kg/m <sup>2</sup>	23.9 (6.0)	24.1 (5.9)	24.9 (7.9)

Data are *n* (%), unless otherwise specified.

*BMI* body mass index, *q2w* every 2 weeks, *q4w* every 4 weeks, *SD* standard deviation

Data from table 1 in Simpson EL, et al. Efficacy and safety dupilumab in adolescents with uncontrolled moderate to severe atopic dermatitis a phase 3 randomized clinical trial. *JAMA Dermatol.* 2020;156:44–56.

**Supplemental Table S2a** Summary statistics for hematology laboratory parameters: red blood cells and platelets

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
<b>Hematocrit (%)</b> NR (age 13–17 years) Male: 33.9–43.5 Female: 33.4–40.4	Median (Q1, Q3), <i>n</i> 1	BL	43.0 (40.3, 45.0), 85	42.0 (39.7, 45.9), 82	43.2 (40.4, 45.8), 83
		4	42.8 (40.4, 44.9), 79	41.5 (39.3, 44.9), 81	42.6 (40.0, 45.0), 79
		8	43.2 (40.3, 45.4), 76	42.0 (39.2, 45.6), 76	43.3 (39.6, 45.7), 78
		16	41.9 (40.0, 45.3), 72	41.4 (38.8, 45.2), 75	42.4 (39.0, 44.7), 78
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0 (2.7), 79	–0.5 (2.4), 81	–0.3 (2.4), 79
		8	–0.1 (2.5), 76	–0.5 (2.3), 76	–0.1 (2.6), 78
16		–0.5 (3.0), 72	–0.8 (2.4), 75	–0.7 (2.8), 78	
<b>Hemoglobin (g/L)</b> NR (age 13–17 years) Male: 110–145 Female: 108–133	Median (Q1, Q3), <i>n</i> 1	BL	140.0 (133.0, 150.0), 85	140.0 (131.0, 150.0), 82	143.0 (133.0, 151.0), 83
		4	140.0 (134.0, 149.0), 79	138.0 (129.0, 149.0), 81	141.0 (134.0, 151.0), 79
		8	142.5 (133.0, 150.0), 76	138.5 (128.5, 149.5), 76	143.0 (132.0, 151.0), 78
		16	138.5 (133.5, 149.5), 72	138.0 (128.0, 152.0), 75	143.0 (131.0, 149.0), 78
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0.1 (7.8), 79	–1.2 (7.3), 81	–0.5 (7.3), 79
		8	0.3 (7.5), 76	–0.9 (7.3), 76	0.3 (8.5), 78
16		–0.8 (9.5), 72	–1.2 (8.3), 75	–0.8 (8.7), 78	
<b>Erythrocyte mean corpuscular hemoglobin (pg)</b> NR (age 13–17 years) Male: 25.2–30.2 Female: 24.8–30.2	Median (Q1, Q3), <i>n</i> 1	BL	28.5 (27.6, 29.5), 85	28.4 (27.4, 29.5), 82	29.1 (27.8, 29.8), 83
		4	28.5 (27.4, 29.3), 79	28.3 (27.4, 29.5), 81	29.0 (27.7, 29.7), 79
		8	28.3 (27.5, 29.3), 76	28.4 (27.3, 29.5), 76	29.0 (27.5, 29.7), 78
		16	28.4 (27.4, 29.5), 72	28.4 (27.2, 29.4), 75	29.0 (27.4, 29.6), 78
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	–0.1 (0.6), 79	–0 (0.5), 81	–0.1 (0.6), 79
		8	–0.1 (0.5), 76	–0.1 (0.6), 76	–0.2 (1.0), 78
16		–0.2 (0.5), 72	–0.1 (0.6), 75	–0.2 (1.2), 78	
<b>Erythrocyte mean corpuscular hemoglobin concentration (g/dL)</b> NR (age 13–17 years) Male: 31.8–34.8 Female: 31.5–34.2	Median (Q1, Q3), <i>n</i> 1	BL	33.0 (32.5, 33.6), 85	32.9 (32.5, 33.5), 82	33.0 (32.6, 33.5), 83
		4	33.0 (32.4, 33.5), 79	33.1 (32.6, 33.5), 81	33.3 (32.7, 33.7), 79
		8	33.1 (32.7, 33.6), 76	33.1 (32.6, 33.5), 76	33.3 (32.8, 33.6), 78
		16	33.4 (32.8, 33.7), 72	33.3 (32.8, 33.8), 75	33.4 (32.9, 33.8), 78
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0 (0.8), 79	0.2 (0.8), 81	0.1 (0.8), 79
		8	0.1 (0.8), 76	0.2 (0.8), 76	0.1 (0.9), 78
16		0.2 (0.8), 72	0.4 (0.7), 75	0.3 (0.8), 78	

Dupilumab Lab Safety in Adolescents with Atopic Dermatitis

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
<b>Erythrocyte mean corpuscular volume (fL)</b>  NR (age 13–17 years) Male: 76.7–89.2 Female: 76.9–90.6	Median (Q1, Q3), <i>n</i> 1	BL	86.5 (83.7, 89.2), 85	86.5 (83.3, 89.3), 82	87.0 (84.2, 89.5), 83
		4	85.7 (83.0, 89.7), 79	86.1 (82.9, 88.7), 81	86.8 (83.6, 89.0), 79
		8	85.4 (82.4, 88.3), 76	85.8 (82.4, 88.4), 76	86.7 (83.3, 88.8), 78
		16	85.3 (82.7, 87.6), 72	84.5 (81.4, 88.3), 75	85.7 (82.9, 88.1), 78
	Mean change from baseline (± SD), <i>n</i> 1	4	−0.3 (1.7), 79	−0.5 (2.0), 81	−0.5 (2.0), 79
		8	−0.8 (1.8), 76	−0.8 (2.1), 76	−0.7 (2.9), 78
		16	−1.3 (2.1), 72	−1.4 (2.1), 75	−1.4 (3.5), 78
<b>Erythrocytes (10<sup>12</sup>/L)</b>  NR (age 13–17 years) Male: 4.0–5.3 Female: 3.9–4.9	Median (Q1, Q3), <i>n</i> 1	BL	4.9 (4.7, 5.3), 85	4.9 (4.6, 5.3), 82	5.0 (4.6, 5.3), 83
		4	5.0 (4.6, 5.3), 79	4.9 (4.6, 5.2), 81	5.0 (4.7, 5.3), 79
		8	5.0 (4.7, 5.3), 76	4.9 (4.6, 5.2), 76	5.0 (4.7, 5.3), 78
		16	4.9 (4.7, 5.3), 72	5.0 (4.7, 5.3), 75	5.0 (4.7, 5.2), 78
	Mean change from baseline (± SD), <i>n</i> 1	4	0 (0.3), 79	0 (0.3), 81	0 (0.3), 79
		8	0 (0.3), 76	0 (0.3), 76	0 (0.3), 78
		16	0 (0.3), 72	0 (0.3), 75	0 (0.3), 78
<b>Platelets (10<sup>9</sup>/L)</b>  NR (age 13–17 years) Male: 159–353 Female: 138–345	Median (Q1, Q3), <i>n</i> 1	BL	294.0 (248.0, 327.0), 83	296.5 (240.0, 340.0), 82	298.5 (237.0, 331.0), 82
		4	293.0 (249.0, 337.0), 75	282.5 (232.0, 331.0), 78	279.5 (236.0, 316.0), 78
		8	275.0 (248.0, 322.0), 73	277.0 (231.0, 322.0), 75	272.0 (236.5, 319.5), 76
		16	273.0 (238.0, 326.0), 69	277.0 (232.0, 320.0), 74	265.0 (231.0, 318.0), 77
	Mean change from baseline (± SD), <i>n</i> 1	4	2.6 (42.1), 74	−11.1 (46.2), 78	−11.3 (41.8), 77
		8	−8.3 (38.9), 72	−15.9 (41.5), 75	−14.7 (49.7), 75
		16	−8.1 (44.2), 67	−17.6 (58.1), 74	−15.4 (50.1), 76

*BL* baseline, *n* total number of patients in the treatment group, *n*1 number of patients at visit, *NR* normal range, *Q*1 quartile 1, *Q*3 quartile 3, *q*2w every 2 weeks, *q*4w every 4 weeks, *SD* standard deviation

**Supplemental Table S2b** Proportion of patients with grades 1–3 anemia, *n1/n2* (%)

Time point	Grade	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
Baseline	Grade 1 (Mild): < LLN–100 g/L	0/85	0/82	1/83 (1.2)
	Grade 2 (Moderate): < 100–80 g/L	0/85	0/82	0/83
	Grade 3 (Severe): < 80 g/L	0/85	0/82	0/83
Week 4	Grade 1 (Mild): < LLN–100 g/L	2/79 (2.5)	0/81	0/79
	Grade 2 (Moderate): < 100–80 g/L	1/79 (1.3)	0/81	0/79
	Grade 3 (Severe): < 80 g/L	0/79	0/81	0/79
Week 8	Grade 1 (Mild): < LLN–100 g/L	0/76	0/76	0/78
	Grade 2 (Moderate): < 100–80 g/L	1/76 (1.3)	0/76	0/78
	Grade 3 (Severe): < 80 g/L	0/76	0/76	0/78
Week 16	Grade 1 (Mild): < LLN–100 g/L	0/72	0/75	1/78 (1.3)
	Grade 2 (Moderate): < 100–80 g/L	1/72 (1.4)	0/75	1/78 (1.3)
	Grade 3 (Severe): < 80 g/L	0/72	0/75	0/78

Patients may have had grades 1–2 changes at more than one time point

*n1/n2* number of patients with grade/number of patients assessed at that time point, *q2w* every 2 weeks, *q4w* every 4 weeks, *LLN* lower limit of normal

**Supplemental Table S2c** Shift from baseline: platelets ( $\times 10^9/L$ )

Study week	Evaluation $n1/n2$ (%)	Placebo ( $n = 85$ )			Dupilumab 200/300 mg q2w ( $n = 82$ )			Dupilumab 300 mg q4w ( $n = 83$ )		
		Baseline status								
		Low	Normal	High	Low	Normal	High	Low	Normal	High
4	Low	1/2 (50.0)	0/56	0/16	0/0	0/55	0/23	1/1 (100)	0/60	0/16
	Normal	1/2 (50.0)	52/56 (92.9)	3/16 (18.8)	0/0	54/55 (98.2)	5/23 (21.7)	0/1	57/60 (95.0)	8/16 (50.0)
	High	0/2	4/56 (7.1)	13/16 (81.3)	0/0	1/55 (1.8)	18/23 (78.3)	0/1	3/60 (5.0)	8/16 (50.0)
8	Low	1/1 (100)	1/57 (1.8)	0/14	0/0	0/54	0/21	1/1 (100)	0/56	0/18
	Normal	0/1	53/57 (93.0)	4/14 (28.6)	0/0	53/54 (98.1)	8/21 (38.1)	0/1	52/56 (92.9)	9/18 (50.0)
	High	0/1	3/57 (5.3)	10/14 (71.4)	0/0	1/54 (1.9)	13/21 (61.9)	0/1	4/56 (7.1)	9/18 (50.0)
16	Low	1/2 (50.0)	0/54	0/11	0/0	1/53 (1.9)	0/21	0/1	0/58	0/17
	Normal	1/2 (50.0)	53/54 (98.1)	4/11 (36.4)	0/0	50/53 (94.3)	12/21 (57.1)	1/1 (100)	55/58 (94.8)	12/17 (70.6)
	High	0/2	1/54 (1.9)	7/11 (63.6)	0/0	2/53 (3.8)	9/21 (42.9)	0/1	3/58 (5.2)	5/17 (29.4)

$n$  total number of patients in the treatment group,  $n1$  number of patients with evaluation level at visit,  $n2$  number of patients with baseline status,  $q2w$  every 2 weeks,  $q4w$  every 4 weeks

**Supplemental Table S3a** Summary statistics for hematology laboratory parameters: white blood cells

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
<b>Leukocytes (10<sup>9</sup>/L)</b>  NR (age 13–17 years) Male: 3.8–9.8 Female: 4.2–9.4	Median (Q1, Q3), <i>n</i> 1	BL	7.9 (6.4, 9.0), 85	7.7 (6.5, 8.8), 82	7.6 (6.5, 9.6), 83
		4	7.6 (6.4, 8.7), 79	7.6 (6.4, 8.9), 81	7.4 (6.1, 8.6), 79
		8	7.4 (6.2, 8.2), 76	7.8 (6.2, 9.6), 76	7.7 (6.3, 9.4), 78
		16	7.7 (6.4, 8.6), 72	7.3 (6.4, 9.1), 75	7.2 (6.2, 9.1), 78
	Mean change from baseline (± SD), <i>n</i> 1	4	−0.1 (1.9), 79	0 (2.0), 81	−0.3 (1.7), 79
		8	−0.4 (1.6), 76	0.2 (2.0), 76	0.1 (2.1), 78
		16	−0.3 (1.8), 72	0 (2.3), 75	−0.4 (1.8), 78
<b>Basophils (10<sup>9</sup>/L)</b>  NR (age 13–17 years) All: 0–0.20	Median (Q1, Q3), <i>n</i> 1	BL	0.03 (0.02, 0.04), 85	0.03 (0.02, 0.04), 82	0.03 (0.02, 0.03), 83
		4	0.03 (0.02, 0.04), 78	0.03 (0.02, 0.05), 81	0.03 (0.02, 0.04), 79
		8	0.02 (0.01, 0.04), 76	0.03 (0.02, 0.04), 76	0.03 (0.02, 0.04), 78
		16	0.03 (0.01, 0.04), 72	0.03 (0.02, 0.04), 74	0.02 (0.01, 0.04), 78
	Mean change from baseline (± SD), <i>n</i> 1	4	0 (0.02), 78	0 (0.02), 81	0 (0.02), 79
		8	0 (0.02), 76	0.01 (0.03), 76	0 (0.02), 78
		16	0 (0.02), 72	0.02 (0.10), 74	0 (0.03), 78
<b>Basophils/ leukocytes (%)</b>  NR (age 13–17 years) All: 1.0–2.0	Median (Q1, Q3), <i>n</i> 1	BL	0.3 (0.3, 0.5), 85	0.4 (0.2, 0.5), 82	0.3 (0.2, 0.4), 83
		4	0.3 (0.2, 0.5), 78	0.4 (0.3, 0.5), 81	0.4 (0.3, 0.5), 79
		8	0.3 (0.2, 0.5), 76	0.4 (0.2, 0.5), 76	0.4 (0.2, 0.5), 78
		16	0.3 (0.2, 0.5), 72	0.4 (0.2, 0.5), 74	0.3 (0.2, 0.5), 78
	Mean change from baseline (± SD), <i>n</i> 1	4	0 (0.3), 78	0.1 (0.3), 81	0.1 (0.3), 79
		8	0 (0.3), 76	0.1 (0.3), 76	0 (0.2), 78
		16	0 (0.3), 72	0.2 (1.7), 74	0 (0.3), 78
<b>Eosinophils (10<sup>9</sup>/L)</b>  NR (age 13–17 years) All: 0–0.50	Median (Q1, Q3), <i>n</i> 1	BL	0.7 (0.3, 1.1), 85	0.6 (0.4, 1.1), 82	0.7 (0.4, 1.0), 83
		4	0.6 (0.3, 1.0), 78	0.6 (0.3, 1.1), 81	0.6 (0.3, 1.1), 79
		8	0.6 (0.3, 1.0), 76	0.6 (0.4, 1.1), 76	0.6 (0.3, 1.3), 78
		16	0.6 (0.3, 1.0), 72	0.6 (0.4, 1.0), 74	0.5 (0.3, 0.9), 78
	Mean change from baseline (± SD), <i>n</i> 1	4	−0.1 (0.4), 78	0 (0.6), 81	0 (0.5), 79
		8	−0.1 (0.5), 76	0.2 (0.8), 76	0.2 (0.7), 78
		16	−0.1 (0.5), 72	0 (0.8), 74	−0.1 (0.5), 78



Dupilumab Lab Safety in Adolescents with Atopic Dermatitis

Laboratory parameter	Measurement	Study week	Placebo (n = 85)	Dupilumab 200/300 mg q2w (n = 82)	Dupilumab 300 mg q4w (n = 83)
<b>Eosinophils/ leukocytes (%)</b>	Median (Q1, Q3), n1	BL	9.2 (4.9, 13.7), 85	8.2 (5.3, 13.7), 82	8.8 (5.5, 14.2), 83
		4	8.0 (4.6, 13.2), 78	8.8 (4.3, 13.7), 81	8.7 (4.4, 14.2), 79
		8	8.3 (5.3, 13.5), 76	8.9 (5.3, 14.9), 76	8.1 (3.6, 16.6), 78
		16	7.8 (4.9, 13.0), 72	8.7 (4.2, 12.6), 73	7.4 (3.9, 14.0), 78
	Mean change from baseline ( $\pm$ SD), n1	4	-0.7 (4.6), 78	0.1 (5.0), 81	0.5 (5.2), 79
		8	-0.6 (5.4), 76	1.2 (6.8), 76	1.4 (7.2), 78
16		-0.7 (5.5), 72	-0.1 (6.5), 73	-0.8 (6.2), 78	
<b>Lymphocytes (10<sup>9</sup>/L)</b>	Median (Q1, Q3), n1	BL	2.1 (1.8, 2.6), 85	2.1 (1.7, 2.6), 82	2.0 (1.6, 2.5), 83
		4	2.2 (1.8, 2.5), 78	2.3 (2.0, 2.7), 81	2.1 (1.8, 2.6), 79
		8	2.1 (1.7, 2.5), 76	2.3 (1.9, 2.8), 76	2.2 (1.7, 2.7), 78
		16	2.1 (1.7, 2.7), 72	2.3 (1.9, 2.6), 74	2.0 (1.8, 2.6), 78
	Mean change from baseline ( $\pm$ SD), n1	4	0 (0.5), 78	0.2 (0.5), 81	0.1 (0.5), 79
		8	0 (0.5), 76	0.2 (0.6), 76	0.2 (0.7), 78
16		0 (0.5), 72	0.1 (0.5), 74	0.1 (0.6), 78	
<b>Lymphocytes/ leukocytes (%)</b>	Median (Q1, Q3), n1	BL	29.2 (22.5, 36.3), 85	27.6 (23.6, 32.8), 82	28.4 (20.8, 33.9), 83
		4	28.3 (23.3, 34.0), 78	31.0 (25.7, 35.6), 81	28.9 (23.2, 36.4), 79
		8	29.0 (24.9, 34.1), 76	29.4 (24.7, 35.4), 76	27.7 (22.8, 36.9), 78
		16	28.4 (23.1, 35.1), 72	29.0 (25.2, 34.1), 74	28.8 (24.0, 35.8), 78
	Mean change from baseline ( $\pm$ SD), n1	4	0.3 (7.2), 78	2.4 (7.1), 81	1.8 (6.5), 79
		8	0.5 (7.8), 76	1.3 (7.7), 76	1.8 (9.1), 78
16		0.1 (8.0), 72	1.1 (8.1), 74	2.1 (7.6), 78	
<b>Monocytes (10<sup>9</sup>/L)</b>	Median (Q1, Q3), n1	BL	0.5 (0.3, 0.6), 85	0.4 (0.3, 0.6), 82	0.5 (0.4, 0.6), 83
		4	0.4 (0.3, 0.5), 78	0.5 (0.3, 0.5), 81	0.4 (0.3, 0.6), 79
		8	0.5 (0.4, 0.5), 76	0.4 (0.3, 0.6), 76	0.5 (0.4, 0.6), 78
		16	0.4 (0.3, 0.6), 72	0.5 (0.3, 0.6), 74	0.4 (0.3, 0.6), 78
	Mean change from baseline ( $\pm$ SD), n1	4	0 (0.2), 78	0 (0.2), 81	0 (0.3), 79
		8	0 (0.2), 76	0 (0.2), 76	0 (0.3), 78
16		0 (0.2), 72	0 (0.2), 74	-0.1 (0.3), 78	

Dupilumab Lab Safety in Adolescents with Atopic Dermatitis

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)	
<b>Monocytes/ leukocytes (%)</b>	Median (Q1, Q3), <i>n</i> 1	BL	5.5 (4.6, 6.8), 85	6.1 (4.4, 7.7), 82	6.6 (4.6, 7.8), 83	
		4	5.8 (4.5, 7.2), 78	5.8 (4.5, 6.9), 81	6.0 (5.0, 7.5), 79	
		8	5.9 (5.1, 7.2), 76	5.6 (4.7, 7.1), 76	6.2 (4.8, 7.8), 78	
		16	6.1 (4.7, 7.7), 72	5.9 (4.4, 7.5), 74	6.4 (4.5, 7.5), 78	
	NR (age 13–17 years) All: 2.0–8.0	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0.1 (2.1), 78	–0.3 (2.5), 81	–0.2 (3.5), 79
			8	0.3 (2.1), 76	–0.3 (2.0), 76	–0.3 (3.7), 78
			16	0.4 (2.2), 72	–0.1 (2.2), 74	–0.5 (3.5), 78
<b>Neutrophils (10<sup>9</sup>/L)</b>	Median (Q1, Q3), <i>n</i> 1	BL	4.3 (3.2, 5.4), 85	4.1 (3.1, 5.4), 82	4.3 (3.2, 5.6), 83	
		4	3.9 (3.1, 5.6), 78	3.9 (3.1, 5.0), 81	3.6 (3.0, 4.8), 79	
		8	3.9 (3.2, 4.8), 76	4.1 (3.4, 4.9), 76	3.9 (3.4, 4.9), 78	
		16	4.1 (3.2, 5.1), 72	3.9 (3.3, 5.0), 74	4.0 (3.1, 5.0), 78	
	NR (age 13–17 years) All: 1.8–8.0	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0 (1.6), 78	–0.2 (1.6), 81	–0.4 (1.4), 79
			8	–0.3 (1.4), 76	–0.2 (1.5), 76	–0.3 (1.8), 78
			16	–0.2 (1.6), 72	–0.1 (1.9), 74	–0.3 (1.6), 78
<b>Neutrophils/ leukocytes (%)</b>	Median (Q1, Q3), <i>n</i> 1	BL	54.2 (45.2, 62.3), 85	54.6 (48.0, 61.6), 82	55.2 (46.8, 62.8), 83	
		4	55.5 (46.9, 61.6), 78	53.7 (43.9, 60.2), 81	51.7 (46.3, 60.6), 79	
		8	55.3 (48.4, 59.9), 76	52.8 (47.1, 60.9), 76	51.8 (46.3, 58.0), 78	
		16	56.1 (44.4, 62.1), 72	54.1 (48.8, 60.9), 74	54.8 (47.3, 62.7), 78	
	NR (age 13–17 years) All: 30.0–70.0	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0.2 (9.0), 78	–2.2 (8.9), 81	–2.1 (8.3), 79
			8	–0.3 (9.4), 76	–2.3 (9.3), 76	–2.9 (11.8), 78
			16	0.3 (9.7), 72	–1.0 (10.0), 74	–0.8 (9.5), 78

*BL* baseline, *n* total number of patients in the treatment group, *n*1 number of patients at visit, *NR* normal range, *Q*1 quartile 1, *Q*3 quartile 3, *q*2w every 2 weeks, *q*4w every 4 weeks, *SD* standard deviation

**Supplemental Table S3b** Shift from baseline: white blood cells

**Eosinophils ( $\times 10^9/L$ )**

Study week	Evaluation $n1/n2$ (%)	Placebo ( $n = 85$ )			Dupilumab 200/300 mg q2w ( $n = 82$ )			Dupilumab 300 mg q4w ( $n = 83$ )		
		Baseline status								
		Low	Normal	High	Low	Normal	High	Low	Normal	High
4	Low	0/0	0/32	0/46	0/0	0/35	0/46	0/0	0/29	0/50
	Normal	0/0	25/32 (78.1)	9/46 (19.6)	0/0	26/35 (74.3)	6/46 (13.0)	0/0	24/29 (82.8)	11/50 (22.0)
	High	0/0	7/32 (21.9)	37/46 (80.4)	0/0	9/35 (25.7)	40/46 (87.0)	0/0	5/29 (17.2)	39/50 (78.0)
8	Low	0/0	0/31	0/45	0/0	0/33	0/43	0/0	0/29	0/49
	Normal	0/0	27/31 (87.1)	7/45 (15.6)	0/0	21/33 (63.6)	7/43 (16.3)	0/0	23/29 (79.3)	10/49 (20.4)
	High	0/0	4/31 (12.9)	38/45 (84.4)	0/0	12/33 (36.4)	36/43 (83.7)	0/0	6/29 (20.7)	39/49 (79.6)
16	Low	0/0	0/31	0/41	0/0	0/31	0/43	0/0	0/28	0/50
	Normal	0/0	23/31 (74.2)	10/41 (24.4)	0/0	24/31 (77.4)	8/43 (18.6)	0/0	22/28 (78.6)	17/50 (34.0)
	High	0/0	8/31 (25.8)	31/41 (75.6)	0/0	7/31 (22.6)	35/43 (81.4)	0/0	6/28 (21.4)	33/50 (66.0)

**Neutrophils ( $\times 10^9/L$ )**

Study week	Evaluation $n1/n2$ (%)	Placebo ( $n = 85$ )			Dupilumab 200/300 mg q2w ( $n = 82$ )			Dupilumab 300 mg q4w ( $n = 83$ )		
		Baseline status								
		Low	Normal	High	Low	Normal	High	Low	Normal	High
4	Low	0/1	2/76 (2.6)	0/1	1/2 (50.0)	0/74	0/5	0/0	1/78 (1.3)	0/1
	Normal	1/1 (100)	71/76 (93.4)	1/1 (100)	1/2 (50.0)	73/74 (98.6)	3/5 (60.0)	0/0	76/78 (97.4)	1/1 (100)
	High	0/1	3/76 (3.9)	0/1	0/2	1/74 (1.4)	2/5 (40.0)	0/0	1/78 (1.3)	0/1
8	Low	1/1 (100)	0/74	0/1	1/2 (50.0)	2/69 (2.9)	0/5	0/0	1/77 (1.3)	0/1
	Normal	0/1	74/74 (100)	1/1 (100)	1/2 (50.0)	67/69 (97.1)	2/5 (40.0)	0/0	74/77 (96.1)	1/1 (100)
	High	0/1	0/74	0/1	0/2	0/69	3/5 (60.0)	0/0	2/77 (2.6)	0/1
16	Low	0/1	1/70 (1.4)	0/1	0/2	0/67	0/5	0/0	1/77 (1.3)	0/1
	Normal	1/1 (100)	68/70 (97.1)	1/1 (100)	2/2 (100)	66/67 (98.5)	3/5 (60.0)	0/0	75/77 (97.4)	1/1 (100)
	High	0/1	1/70 (1.4)	0/1	0/2	1/67 (1.5)	2/5 (40.0)	0/0	1/77 (1.3)	0/1

$n$  total number of patients in the treatment group,  $n1$  number of patients with evaluation level at visit,  $n2$  number of patients with baseline status,  $q2w$  every 2 weeks,  $q4w$  every 4 weeks

**Supplemental Table S4a** Summary statistics for serum chemistry laboratory parameters: metabolic function

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
<b>Albumin (g/L)</b>  NR (age 7–17 years) All: 37.0–56.0	Median (Q1, Q3), <i>n</i> 1	BL	46.0 (44.0, 47.0), 85	46.0 (43.0, 48.0), 82	46.0 (44.0, 48.0), 83
		4	46.0 (44.0, 48.0), 81	45.0 (44.0, 47.0), 81	46.0 (44.0, 48.0), 81
		8	46.0 (44.0, 47.0), 80	45.0 (44.0, 47.0), 77	46.0 (44.0, 47.5), 80
		16	46.0 (44.0, 47.0), 78	45.0 (43.0, 47.0), 76	46.0 (44.0, 47.0), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0.5 (2.8), 81	-0.3 (2.5), 81	-0.2 (3.1), 81
		8	0 (2.8), 80	-0.2 (3.0), 77	-0.3 (3.2), 80
16		-0.3 (3.0), 78	-0.4 (2.9), 76	0.0 (3.4), 80	
<b>Creatine kinase (U/L)</b>  NR (age 2–17 years) Male: 50–297 Female: 33–198	Median (Q1, Q3), <i>n</i> 1	BL	106.0 (78.0, 141.0), 85	94.5 (68.0, 132.0), 82	92.0 (68.0, 147.0), 83
		4	98.5 (77.0, 135.0), 82	97.0 (66.0, 140.0), 81	98.0 (69.0, 160), 80
		8	95.0 (73.5, 121.5), 80	101.5 (69.0, 148.5), 76	93.0 (70.0, 151.0), 79
		16	106.0 (77.0, 160.0), 78	107.0 (72.0, 152.0), 75	106.5 (77.5, 155.0), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	-2.9 (65.3), 82	8.0 (122.9), 81	-3.5 (122.0), 80
		8	-10.9 (58.2), 80	15.6 (116.1), 76	2.8 (158.5), 79
16		122.8 (676.1), 78	3.4 (93.3), 75	5.7 (179.0), 80	
<b>Glucose (mmol/L)</b>  NR (age 1–17 years) All: 3.6–5.8	Median (Q1, Q3), <i>n</i> 1	BL	4.7 (4.3, 5.0), 85	4.7 (4.4, 5.2), 82	4.7 (4.3, 5.2), 83
		4	4.8 (4.3, 5.2), 82	4.7 (4.2, 5.2), 80	4.7 (4.4, 5.1), 80
		8	4.8 (4.4, 5.1), 79	4.9 (4.4, 5.2), 75	4.8 (4.4, 5.2), 79
		16	4.8 (4.5, 5.3), 78	4.9 (4.6, 5.2), 75	4.9 (4.4, 5.2), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0.1 (0.9), 82	0 (0.7), 80	0.1 (0.9), 80
		8	0.1 (0.8), 79	0.1 (0.8), 75	0.1 (0.9), 79
16		0.2 (0.9), 78	0.1 (0.8), 75	0.2 (0.9), 80	
<b>Protein (g/L)</b>  NR (all ages) All: 60.0–80.0	Median (Q1, Q3), <i>n</i> 1	BL	74.0 (70.0, 76.0), 85	74.0 (70.0, 78.0), 82	73.0 (70.0, 75.0), 83
		4	74.0 (72.0, 77.0), 82	73.0 (70.0, 76.0), 81	72.0 (70.0, 75.0), 80
		8	74.0 (70.0, 77.0), 80	73.0 (69.5, 75.0), 76	73.0 (70.0, 75.0), 79
		16	74.0 (71.0, 77.0), 78	72.0 (70.0, 75.0), 75	72.0 (70.0, 74.5), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	1.3 (4.2), 82	-0.7 (4.4), 81	0.1 (4.4), 80
		8	0.9 (4.1), 80	-1.2 (4.6), 76	-0.3 (4.9), 79
16		0.7 (4.6), 78	-1.0 (4.7), 75	-0.4 (5.6), 80	

*BL* baseline, *n* total number of patients in the treatment group, *n*1 number of patients at visit, *NR* normal range, *Q*1 quartile 1, *Q*3 quartile 3, *q*2w every 2 weeks, *q*4w every 4 weeks, *SD* standard deviation

**Supplemental Table S4b** Summary statistics for serum chemistry laboratory parameters: electrolytes

Laboratory parameter	Measurement	Study week	Placebo (n = 85)	Dupilumab 200/300 mg q2w (n = 82)	Dupilumab 300 mg q4w (n = 83)
<b>Bicarbonate (mmol/L)</b> NR (age 1–17 years) All: 21.0–33.0	Median (Q1, Q3), n1	BL	23.0 (21.0, 24.0), 85	23.0 (21.0, 25.0), 82	23.0 (20.0, 25.0), 83
		4	23.0 (21.0, 24.0), 82	24.0 (21.0, 25.0), 80	23.0 (21.0, 24.0), 80
		8	23.0 (21.0, 25.0), 80	23.0 (21.0, 25.0), 75	23.0 (21.0, 25.0), 79
		16	24.0 (22.0, 26.0), 78	24.0 (21.0, 25.0), 75	23.0 (21.5, 25.0), 80
	Mean change from baseline ( $\pm$ SD), n1	4	0.2 (2.8), 82	0.3 (3.4), 80	0.2 (3.1), 80
		8	0.7 (3.0), 80	-0.1 (3.4), 75	0.6 (3.5), 79
		16	1.1 (3.2), 78	0.3 (3.3), 75	0.7 (3.7), 80
<b>Calcium (mmol/L)</b> NR (all ages) All: 1.52–3.22	Median (Q1, Q3), n1	BL	2.4 (2.3, 2.5), 85	2.4 (2.3, 2.5), 82	2.4 (2.3, 2.5), 83
		4	2.4 (2.3, 2.5), 81	2.4 (2.3, 2.4), 80	2.4 (2.3, 2.5), 80
		8	2.4 (2.3, 2.5), 80	2.4 (2.3, 2.4), 76	2.4 (2.3, 2.4), 80
		16	2.4 (2.4, 2.5), 78	2.4 (2.3, 2.4), 76	2.4 (2.3, 2.4), 80
	Mean change from baseline ( $\pm$ SD), n1	4	0 (0.1), 81	0 (0.1), 80	0 (0.1), 80
		8	0 (0.1), 80	0 (0.1), 76	0 (0.1), 80
		16	0 (0.1), 78	0 (0.1), 76	0 (0.1), 80
<b>Chloride (mmol/L)</b> NR (age 1–17 years) All: 95.0–110.0	Median (Q1, Q3), n1	BL	101.0 (99.0, 102.0), 85	100.0 (99.0, 102.0), 82	101.0 (99.0, 102.0), 83
		4	100.0 (99.0, 101.0), 82	100.0 (99.0, 101.0), 81	100.0 (99.0, 102.0), 80
		8	100.0 (99.0, 101.0), 80	100.0 (99.0, 101.0), 76	100.0 (99.0, 102.0), 80
		16	100.0 (99.0, 101.0), 78	100.5 (99.0, 102.0), 76	100.0 (99.0, 101.0), 80
	Mean change from baseline ( $\pm$ SD), n1	4	-0.7 (2.3), 82	-0.3 (2.3), 81	0.0 (2.2), 80
		8	-0.5 (2.2), 80	0.0 (2.3), 76	-0.1 (2.4), 80
		16	-0.5 (2.2), 78	0.0 (2.1), 76	-0.4 (2.5), 80
<b>Potassium (mmol/L)</b> NR (age 1–17 years) All: 3.5–5.0	Median (Q1, Q3), n1	BL	4.2 (4.0, 4.4), 85	4.2 (4.0, 4.5), 82	4.2 (4.0, 4.4), 83
		4	4.2 (4.0, 4.3), 81	4.2 (4.0, 4.3), 81	4.2 (4.1, 4.3), 81
		8	4.2 (4.0, 4.5), 80	4.2 (4.0, 4.4), 77	4.2 (4.1, 4.5), 80
		16	4.2 (4.0, 4.5), 78	4.2 (4.0, 4.5), 76	4.2 (4.0, 4.4), 80
	Mean change from baseline ( $\pm$ SD), n1	4	0 (0.3), 81	-0.1 (0.4), 81	0 (0.3), 81
		8	0 (0.4), 80	-0.1 (0.3), 77	0 (0.3), 80
		16	0 (0.3), 78	0 (0.4), 76	0 (0.4), 80

Dupilumab Lab Safety in Adolescents with Atopic Dermatitis

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
<b>Sodium (mmol/L)</b>  NR (age 1–17 years) All: 133.0–145.0	Median (Q1, Q3), <i>n1</i>	BL	140.0 (139.0, 141.0), 85	141.0 (139.0, 142.0), 82	140.0 (139.0, 142.0), 83
		4	139.0 (138.0, 141.0), 81	140.0 (139.0, 141.0), 81	140.0 (139.0, 141.0), 81
		8	140.0 (138.0, 141.0), 80	140.0 (139.0, 141.0), 77	140.0 (139.0, 141.0), 80
		16	140.0 (139.0, 141.0), 78	140.0 (139.0, 141.0), 76	140.0 (139.0, 141.0), 80
	Mean change from baseline (± SD), <i>n1</i>	4	−0.9 (2.0), 81	−0.7 (2.6), 81	−0.6 (2.0), 81
		8	−0.5 (2.5), 80	−0.7 (2.4), 77	−0.6 (2.5), 80
		16	−0.1 (2.5), 78	−0.6 (2.4), 76	−0.6 (2.4), 80

*BL* baseline, *n* total number of patients in the treatment group, *n1* number of patients at visit, *NR* normal range, *Q1* quartile 1, *Q3* quartile 3, *q2w* every 2 weeks, *q4w* every 4 weeks, *SD* standard deviation

**Supplemental Table S4c** Summary statistics for serum chemistry laboratory parameters: renal function

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
<b>Blood urea nitrogen (mmol/L)</b>  NR (age 13–17 years) Male: 1.8–7.1 Female: 1.4–5.4	Median (Q1, Q3), <i>n</i> 1	BL	3.9 (3.2, 5.0), 85	3.9 (3.2, 4.6), 82	3.9 (3.2, 5.0), 83
		4	3.9 (3.2, 5.0), 82	4.3 (3.2, 5.0), 81	3.9 (3.2, 5.0), 80
		8	3.9 (3.2, 4.6), 80	4.1 (3.6, 5.0), 76	4.3 (3.6, 5.4), 80
		16	3.9 (3.2, 4.6), 78	3.9 (3.6, 4.3), 76	4.3 (3.6, 5.0), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0 (1.1), 82	0.2 (1.1), 81	0.1 (1.1), 80
		8	-0.1 (1.1), 80	0.1 (1.1), 76	0.2 (1.0), 80
		16	-0.1 (1.1), 78	0.1 (1.3), 76	0.2 (1.1), 80
<b>Creatinine (<math>\mu</math>mol/L)</b>  NR (age 13–18 years) All: 53.0–124.0	Median (Q1, Q3), <i>n</i> 1	BL	53.0 (44.0, 62.0), 85	53.0 (44.0, 62.0), 82	53.0 (44.0, 62.0), 83
		4	53.0 (44.0, 62.0), 82	44.0 (44.0, 62.0), 80	53.0 (44.0, 62.0), 80
		8	53.0 (44.0, 62.0), 80	44.0 (44.0, 62.0), 75	53.0 (44.0, 62.0), 80
		16	53.0 (35.0, 62.0), 78	53.0 (44.0, 62.0), 76	53.0 (44.0, 62.0), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	0.4 (8.2), 82	-1.6 (10.3), 80	-1.8 (7.5), 80
		8	-1.0 (7.6), 80	-2.3 (8.6), 75	-1.4 (9.4), 80
		16	-1.1 (8.7), 78	-1.3 (8.0), 76	0 (10.2), 80
<b>Urate (<math>\mu</math>mol/L)</b>  NR (age 12–19 years) Male: 161–512 Female: 178–351	Median (Q1, Q3), <i>n</i> 1	BL	333.0 (274.0, 375.0), 85	345.0 (297.0, 399.0), 82	333.0 (280.0, 387.0), 83
		4	330.0 (268.0, 393.0), 82	330.0 (286.0, 375.0), 80	327.0 (265.0, 387.0), 80
		8	330.0 (280.0, 399.0), 80	327.0 (274.0, 387.0), 76	333.0 (274.0, 393.0), 79
		16	333.0 (274.0, 381.0), 78	339.0 (286.0, 381.0), 75	315.0 (262.0, 393.0), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	1.7 (46.5), 82	-12.9 (42.8), 80	-11.0 (40.5), 80
		8	3.6 (49.9), 80	-15.7 (48.5), 76	-5.6 (43.8), 79
		16	1.0 (40.6), 78	-11.7 (45.8), 75	-13.1 (45.7), 80

*BL* baseline, *n* total number of patients in the treatment group, *n*1 number of patients at visit, *NR* normal range, *Q*1 quartile 1, *Q*3 quartile 3, *q*2w every 2 weeks, *q*4w every 4 weeks, *SD* standard deviation

**Supplemental Table S4d** Summary statistics for serum chemistry laboratory parameters: liver function

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
<b>Alkaline phosphatase (U/L)</b>  NR (age 13–17 years) Male: 52–390 Female: 47–162	Median (Q1, Q3), <i>n</i> 1	BL	137.0 (95.0, 213.0), 85	132.5 (93.0, 199.0), 82	145.0 (100.0, 209.0), 83
		4	140.0 (95.0, 204.0), 81	134.0 (91.0, 207.0), 81	135.0 (100.5, 223.5), 80
		8	132.5 (93.0, 211.5), 80	139.5 (87.5, 215.5), 76	138.0 (91.5, 210.5), 80
		16	136.5 (93.0, 203.0), 78	161.0 (93.5, 221.5), 76	149.5 (104.5, 239.0), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	–3.4 (33.6), 81	1.0 (20.7), 81	3.7 (23.1), 80
		8	–5.9 (25.2), 80	5.1 (34.7), 76	1.6 (28.4), 80
		16	–5.7 (32.2), 78	12.4 (38.3), 76	5.3 (35.7), 80
<b>Alanine aminotransferase (U/L)</b>  NR (age 14–17 years) Male: 10.0–45.0 Female: 5.0–35.0	Median (Q1, Q3), <i>n</i> 1	BL	17.0 (13.0, 22.0), 85	19.0 (15.0, 26.0), 82	20.0 (14.0, 25.0), 83
		4	16.0 (12.0, 19.0), 82	16.0 (13.0, 21.5), 80	17.0 (12.0, 22.0), 80
		8	16.0 (12.5, 20.0), 80	15.5 (10.5, 21.0), 76	16.0 (12.0, 22.0), 79
		16	16.0 (12.0, 20.0), 78	16.0 (12.0, 20.0), 75	15.0 (11.0, 19.0), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	–2.1 (11.1), 82	–3.7 (12.2), 80	–2.1 (6.9), 80
		8	–2.6 (13.4), 80	–4.4 (15.0), 76	–2.5 (9.3), 79
		16	–2.2 (13.8), 78	–3.4 (20.3), 75	–2.9 (8.0), 80
<b>Aspartate aminotransferase (U/L)</b>  NR (age 1–17 years) All: 11.0–41.0	Median (Q1, Q3), <i>n</i> 1	BL	22.0 (19.0, 27.0), 85	24.0 (20.0, 29.0), 82	23.0 (20.0, 29.0), 83
		4	22.0 (19.0, 25.0), 82	22.0 (19.0, 25.0), 80	20.0 (17.0, 24.0), 80
		8	21.0 (19.0, 24.0), 80	20.0 (18.0, 24.0), 76	20.0 (17.0, 25.0), 79
		16	21.0 (18.0, 26.0), 78	21.0 (17.0, 24.0), 75	20.0 (16.5, 24.0), 80
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	–1.2 (6.7), 82	–3.5 (9.2), 80	–2.7 (6.2), 80
		8	–1.7 (7.0), 80	–4.1 (9.4), 76	–2.3 (7.5), 79
		16	–0.1 (13.0), 78	–3.7 (13.5), 75	–3.4 (6.8), 80
<b>Direct bilirubin (<math>\mu</math>mol/L)</b>  NR (age 1–17 years) All: 0.0–6.8	Median (Q1, Q3), <i>n</i> 1	BL	5.2 (4.5, 5.7), 4	N/A	4.8 (4.4, 5.1), 2
		4	3.8 (1.7, 7.2), 3	4.6 (4.6, 4.6), 1	5.4 (5.0, 5.8), 2
		8	4.3 (1.7, 4.4), 5	N/A	4.3 (4.1, 4.4), 3
		16	4.1 (4.1, 4.1), 1	5.1 (5.1, 5.1), 1	3.9 (3.9, 3.9), 1
	Mean change from baseline ( $\pm$ SD), <i>n</i> 1	4	–0.2 (2.2), 2	N/A	0.7 (N/A), 1
		8	–0.6 (0.8), 3	N/A	–1.0 (N/A), 1
		16	N/A	N/A	N/A



Dupilumab Lab Safety in Adolescents with Atopic Dermatitis

Laboratory parameter	Measurement	Study week	Placebo (n = 85)	Dupilumab 200/300 mg q2w (n = 82)	Dupilumab 300 mg q4w (n = 83)
<b>Bilirubin (µmol/L)</b>	Median (Q1, Q3), n1	BL	4.6 (3.8, 6.8), 85	4.8 (3.8, 7.9), 82	5.3 (3.2, 7.7), 83
		4	4.6 (3.9, 6.3), 82	4.6 (3.4, 7.0), 80	5.3 (4.1, 7.8), 80
		8	5.0 (3.9, 7.8), 80	5.5 (3.9, 7.2), 75	5.1 (3.8, 7.9), 79
		16	5.1 (3.2, 7.7), 78	5.3 (3.9, 7.7), 75	4.7 (3.2, 6.9), 80
	Mean change from baseline (± SD), n1	4	0.2 (2.4), 82	-0.1 (2.5), 80	0.4 (3.5), 80
		8	0.8 (3.7), 80	0.0 (2.5), 75	0.9 (3.6), 79
16		0.2 (3.2), 78	0.4 (2.8), 75	-0.1 (2.3), 80	
<b>Indirect bilirubin (µmol/L)</b>	Median (Q1, Q3), n1	BL	19.7 (18.0, 23.6), 4	N/A	16.4 (15.4, 17.4), 2
		4	18.5 (15.9, 21.0), 2	15.7 (15.7, 15.7), 1	17.5 (15.4, 19.5), 2
		8	15.0 (14.9, 44.3), 3	N/A	21.4 (18.5, 23.9), 3
		16	15.0 (15.0, 15.0), 1	21.0 (21.0, 21.0), 1	16.6 (16.6, 16.6), 1
	Mean change from baseline (± SD), n1	4	-1.3 (3.6), 2	N/A	2.1 (N/A), 1
		8	2.5 (19.5), 3	N/A	1.1 (N/A), 1
16		N/A	N/A	N/A	
<b>Lactate dehydrogenase (U/L)</b>	Median (Q1, Q3), n1	BL	259.0 (223.0, 321.0), 85	277.0 (213.0, 344.0), 82	277.0 (226.0, 365.0), 83
		4	257.0 (213.0, 314.0), 81	217.0 (183.0, 247.0), 81	203.5 (182.0, 251.5), 80
		8	238.0 (202.0, 303.0), 80	210.0 (188.0, 245.0), 76	204.5 (176.5, 243.5), 80
		16	245.5 (199.0, 285.0), 78	205.0 (185.5, 235.0), 76	198.5 (174.0, 228.5), 80
	Mean change from baseline (± SD), n1	4	-11.7 (74.6), 81	-77.0 (78.5), 81	-77.9 (85.6), 80
		8	-22.8 (83.7), 80	-82.0 (82.9), 76	-84.7 (86.2), 80
16		-28.3 (84.7), 78	-87.7 (78.6), 76	-91.9 (84.0), 80	

BL baseline, n total number of patients in the treatment group, n1 number of patients at visit, N/A not available, NR normal range, Q1 quartile 1, Q3 quartile 3, q2w every 2 weeks, q4w every 4 weeks, SD standard deviation

**Supplemental Table S4e** Summary statistics for serum chemistry laboratory parameters: lipid panel

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
<b>Cholesterol (mmol/L)</b>	Median (Q1, Q3), <i>n1</i>	BL	3.8 (3.4, 4.3), 85	3.8 (3.4, 4.3), 82	3.9 (3.5, 4.4), 83
		4	3.9 (3.5, 4.5), 82	3.9 (3.4, 4.3), 81	4.0 (3.5, 4.4), 80
		8	3.8 (3.5, 4.2), 80	3.8 (3.4, 4.3), 76	3.9 (3.5, 4.3), 80
		16	3.8 (3.4, 4.4), 78	3.8 (3.4, 4.2), 76	3.9 (3.4, 4.3), 80
	Mean change from baseline ( $\pm$ SD), <i>n1</i>	4	0.1 (0.5), 82	0.1 (0.5), 81	0.0 (0.5), 80
		8	0.1 (0.4), 80	0.0 (0.5), 76	0.0 (0.5), 80
		16	0.0 (0.5), 78	0.0 (0.5), 76	0.0 (0.6), 80
<b>HDL cholesterol (mmol/L)</b>	Median (Q1, Q3), <i>n1</i>	BL	1.3 (1.0, 1.4), 85	1.2 (1.0, 1.4), 82	1.2 (1.0, 1.4), 83
		4	1.3 (1.1, 1.5), 82	1.1 (1.0, 1.3), 81	1.2 (1.0, 1.5), 80
		8	1.2 (1.0, 1.5), 79	1.2 (1.0, 1.4), 76	1.2 (1.0, 1.4), 79
		16	1.2 (1.0, 1.4), 78	1.2 (1.0, 1.3), 75	1.2 (1.0, 1.4), 80
	Mean change from baseline ( $\pm$ SD), <i>n1</i>	4	0.0 (0.2), 82	0.0 (0.2), 81	0.0 (0.2), 80
		8	0.0 (0.2), 79	0.0 (0.2), 76	0.0 (0.2), 79
		16	0.0 (0.2), 78	0.0 (0.2), 75	0.0 (0.2), 80
<b>LDL cholesterol (mmol/L)</b>	Median (Q1, Q3), <i>n1</i>	BL	2.0 (1.5, 2.4), 83	2.0 (1.7, 2.5), 82	2.0 (1.7, 2.5), 83
		4	2.1 (1.7, 2.4), 82	1.9 (1.6, 2.4), 79	2.0 (1.7, 2.5), 79
		8	2.0 (1.6, 2.4), 79	2.0 (1.6, 2.3), 76	2.0 (1.7, 2.4), 79
		16	2.1 (1.6, 2.4), 78	1.9 (1.6, 2.3), 75	2.0 (1.6, 2.5), 79
	Mean change from baseline ( $\pm$ SD), <i>n1</i>	4	0.1 (0.4), 80	0.0 (0.4), 79	0.0 (0.4), 79
		8	0.1 (0.3), 77	0.0 (0.5), 76	0.0 (0.4), 79
		16	0.0 (0.4), 76	-0.1 (0.5), 75	-0.1 (0.4), 79
<b>Triglycerides (mmol/L)</b>	Median (Q1, Q3), <i>n1</i>	BL	1.1 (0.8, 1.4), 85	1.3 (0.9, 1.8), 82	1.1 (0.8, 1.5), 83
		4	1.1 (0.9, 1.5), 82	1.5 (0.9, 2.2), 79	1.2 (0.9, 1.7), 80
		8	1.1 (0.7, 1.8), 79	1.4 (0.9, 2.0), 76	1.1 (0.8, 1.9), 79
		16	1.0 (0.8, 1.5), 78	1.3 (0.8, 1.9), 75	1.1 (0.8, 1.9), 80
	Mean change from baseline ( $\pm$ SD), <i>n1</i>	4	-0.1 (0.8), 82	0.3 (0.6), 79	0.1 (0.6), 80
		8	0.0 (0.8), 79	0.1 (0.6), 76	0.1 (0.8), 79
		16	-0.1 (0.7), 78	0.1 (0.6), 75	0.1 (0.7), 80

*BL* baseline, *n* total number of patients in the treatment group, *n1* number of patients at visit, *NR* normal range, *Q1* quartile 1, *Q3* quartile 3, *q2w* every 2 weeks, *q4w* every 4 weeks, *SD* standard deviation

**Supplemental Table S5** Shift from baseline: lactate dehydrogenase (U/L)

Study week	Evaluation <i>n1/n2 (%)</i>	Placebo ( <i>n</i> = 85)			Dupilumab 200/300 mg q2w ( <i>n</i> = 82)			Dupilumab 300 mg q4w ( <i>n</i> = 83)		
		Baseline status								
		Low	Normal	High	Low	Normal	High	Low	Normal	High
4	Low	0/0	0/67	0/14	0/0	0/63	0/18	0/0	1/63 (1.6)	0/17
	Normal	0/0	65/67 (97.0)	5/14 (35.7)	0/0	63/63 (100)	17/18 (94.4)	0/0	61/63 (96.8)	15/17 (88.2)
	High	0/0	2/67 (3.0)	9/14 (64.3)	0/0	0/63	1/18 (5.6)	0/0	1/63 (1.6)	2/17 (11.8)
8	Low	0/0	0/68	0/12	0/0	0/58	0/18	0/0	0/63	0/17
	Normal	0/0	66/68 (97.1)	7/12 (58.3)	0/0	58/58 (100)	16/18 (88.9)	0/0	63/63 (100)	15/17 (88.2)
	High	0/0	2/68 (2.9)	5/12 (41.7)	0/0	0/58	2/18 (11.1)	0/0	0/63	2/17 (11.8)
16	Low	0/0	0/66	0/12	0/0	0/58	0/18	0/0	0/63	0/17
	Normal	0/0	63/66 (95.5)	9/12 (75.0)	0/0	58/58 (100)	16/18 (88.9)	0/0	63/63 (100)	17/17 (100)
	High	0/0	3/66 (4.5)	3/12 (25.0)	0/0	0/58	2/18 (11.1)	0/0	0/63	0/17

*n* total number of patients in the treatment group, *n1* number of patients with evaluation level at visit, *n2* number of patients with baseline status, *q2w* every 2 weeks, *q4w* every 4 weeks

**Supplemental Table S6a** Proportion of patients with grades 1–4 increases in ALP,  $n1/n2$  (%)

Time point	Grade	Placebo ( $n = 85$ )	Dupilumab 200/300 mg q2w ( $n = 82$ )	Dupilumab 300 mg q4w ( $n = 83$ )
Baseline	Grade 1 (Mild): $> ULN-2.5 \times ULN$ if baseline was normal; $2.0-2.5 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 2 (Moderate): $> 2.5-5.0 \times ULN$ if baseline was normal; $> 2.5-5.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
Week 4	Grade 1 (Mild): $> ULN-2.5 \times ULN$ if baseline was normal; $2.0-2.5 \times$ baseline if baseline was abnormal	1/81 (1.2)	3/81 (3.7)	2/80 (2.5)
	Grade 2 (Moderate): $> 2.5-5.0 \times ULN$ if baseline was normal; $> 2.5-5.0 \times$ baseline if baseline was abnormal	0/81	0/81	0/80
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/81	0/81	0/80
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/81	0/81	0/80
Week 8	Grade 1 (Mild): $> ULN-2.5 \times ULN$ if baseline was normal; $2.0-2.5 \times$ baseline if baseline was abnormal	4/80 (5.0)	4/76 (5.3)	4/80 (5.0)
	Grade 2 (Moderate): $> 2.5-5.0 \times ULN$ if baseline was normal; $> 2.5-5.0 \times$ baseline if baseline was abnormal	0/80	0/76	0/80
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/80	0/76	0/80
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/80	0/76	0/80
Week 16	Grade 1 (Mild): $> ULN-2.5 \times ULN$ if baseline was normal; $2.0-2.5 \times$ baseline if baseline was abnormal	4/78 (5.1)	4/76 (5.3)	4/80 (5.0)
	Grade 2 (Moderate): $> 2.5-5.0 \times ULN$ if baseline was normal; $> 2.5-5.0 \times$ baseline if baseline was abnormal	0/78	0/76	0/80
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/78	0/76	0/80
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/78	0/76	0/80

Patients may have had grades 1 change at more than one time point

ALP alkaline phosphatase,  $n$  total number of patients in the treatment group;  $n1/n2$  number of patients with grade/number of patients assessed at that time point,  $q2w$  every 2 weeks,  $q4w$  every 4 weeks,  $ULN$  upper limit of normal

**Supplemental Table S6b** Proportion of patients with grades 1–4 increases in bilirubin,  $n1/n2$  (%)

Time point	Grade	Placebo ( $n = 85$ )	Dupilumab 200/300 mg q2w ( $n = 82$ )	Dupilumab 300 mg q4w ( $n = 83$ )
Baseline	Grade 1 (Mild): $> ULN-1.5 \times ULN$ if baseline was normal; $1.0-1.5 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 2 (Moderate): $> 1.5-3.0 \times ULN$ if baseline was normal; $> 1.5-3.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 3 (Severe): $> 3.0-10.0 \times ULN$ if baseline was normal; $> 3.0-10.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 4 (Potentially life-threatening): $> 10.0 \times ULN$ if baseline was normal; $> 10.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
Week 4	Grade 1 (Mild): $> ULN-1.5 \times ULN$ if baseline was normal; $1.0-1.5 \times$ baseline if baseline was abnormal	2/82 (2.4)	1/80 (1.3)	2/80 (2.5)
	Grade 2 (Moderate): $> 1.5-3.0 \times ULN$ if baseline was normal; $> 1.5-3.0 \times$ baseline if baseline was abnormal	0/82	0/80	0/80
	Grade 3 (Severe): $> 3.0-10.0 \times ULN$ if baseline was normal; $> 3.0-10.0 \times$ baseline if baseline was abnormal	0/82	0/80	0/80
	Grade 4 (Potentially life-threatening): $> 10.0 \times ULN$ if baseline was normal; $> 10.0 \times$ baseline if baseline was abnormal	0/82	0/80	0/80
Week 8	Grade 1 (Mild): $> ULN-1.5 \times ULN$ if baseline was normal; $1.0-1.5 \times$ baseline if baseline was abnormal	2/80 (2.5)	0/75	3/79 (3.8)
	Grade 2 (Moderate): $> 1.5-3.0 \times ULN$ if baseline was normal; $> 1.5-3.0 \times$ baseline if baseline was abnormal	1/80 (1.3)	0/75	0/79
	Grade 3 (Severe): $> 3.0-10.0 \times ULN$ if baseline was normal; $> 3.0-10.0 \times$ baseline if baseline was abnormal	0/80	0/75	0/79
	Grade 4 (Potentially life-threatening): $> 10.0 \times ULN$ if baseline was normal; $> 10.0 \times$ baseline if baseline was abnormal	0/80	0/75	0/79
Week 16	Grade 1 (Mild): $> ULN-1.5 \times ULN$ if baseline was normal; $1.0-1.5 \times$ baseline if baseline was abnormal	1/78 (1.3)	1/75 (1.3)	1/80 (1.3)
	Grade 2 (Moderate): $> 1.5-3.0 \times ULN$ if baseline was normal; $> 1.5-3.0 \times$ baseline if baseline was abnormal	0/78	0/75	0/80
	Grade 3 (Severe): $> 3.0-10.0 \times ULN$ if baseline was normal; $> 3.0-10.0 \times$ baseline if baseline was abnormal	0/78	0/75	0/80
	Grade 4 (Potentially life-threatening): $> 10.0 \times ULN$ if baseline was normal; $> 10.0 \times$ baseline if baseline was abnormal	0/78	0/75	0/80

Patients may have had grades 1 changes at more than one time point

$n$  total number of patients in the treatment group,  $n1/n2$  number of patients with grade/number of patients assessed at that time point,  $q2w$  every 2 weeks,  $q4w$  every 4 weeks,  $ULN$  upper limit of normal

**Supplemental Table S6c** Proportion of patients with grades 1–4 increases in ALT,  $n1/n2$  (%)

Time point	Grade	Placebo ( $n = 85$ )	Dupilumab 200/300 mg q2w ( $n = 82$ )	Dupilumab 300 mg q4w ( $n = 83$ )
Baseline	Grade 1 (Mild): $> ULN-3.0 \times ULN$ if baseline was normal; $1.5-3.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 2 (Moderate): $> 3.0-5.0 \times ULN$ if baseline was normal; $> 3.0-5.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
Week 4	Grade 1 (Mild): $> ULN-3.0 \times ULN$ if baseline was normal; $1.5-3.0 \times$ baseline if baseline was abnormal	4/82 (4.9)	3/80 (3.8)	3/80 (3.8)
	Grade 2 (Moderate): $> 3.0-5.0 \times ULN$ if baseline was normal; $> 3.0-5.0 \times$ baseline if baseline was abnormal	0/82	0/80	0/80
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/82	0/80	0/80
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/82	0/80	0/80
Week 8	Grade 1 (Mild): $> ULN-3.0 \times ULN$ if baseline was normal; $1.5-3.0 \times$ baseline if baseline was abnormal	2/80 (2.5)	1/76 (1.3)	3/79 (3.8)
	Grade 2 (Moderate): $> 3.0-5.0 \times ULN$ if baseline was normal; $> 3.0-5.0 \times$ baseline if baseline was abnormal	1/80 (1.3)	0/76	0/79
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/80	0/76	0/79
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/80	0/76	0/79
Week 16	Grade 1 (Mild): $> ULN-3.0 \times ULN$ if baseline was normal; $1.5-3.0 \times$ baseline if baseline was abnormal	4/78 (5.1)	0/75	3/80 (3.8)
	Grade 2 (Moderate): $> 3.0-5.0 \times ULN$ if baseline was normal; $> 3.0-5.0 \times$ baseline if baseline was abnormal	0/78	1/75 (1.3)	0/80
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/78	0/75	0/80
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/78	0/75	0/80

Patients may have had grades 1–2 changes at more than one time point

ALT alanine aminotransferase,  $n$  total number of patients in the treatment group,  $n1/n2$  number of patients with grade/number of patients assessed at that time point,  $q2w$  every 2 weeks,  $q4w$  every 4 weeks,  $ULN$  upper limit of normal

**Supplemental Table S6d** Proportion of patients with grades 1–4 increases in AST,  $n1/n2$  (%)

Time point	Grade	Placebo ( $n = 85$ )	Dupilumab 200/300 mg q2w ( $n = 82$ )	Dupilumab 300 mg q4w ( $n = 83$ )
Baseline	Grade 1 (Mild): $> ULN-3.0 \times ULN$ if baseline was normal; $1.5-3.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 2 (Moderate): $> 3.0-5.0 \times ULN$ if baseline was normal; $> 3.0-5.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/85	0/82	0/83
Week 4	Grade 1 (Mild): $> ULN-3.0 \times ULN$ if baseline was normal; $1.5-3.0 \times$ baseline if baseline was abnormal	0/82	1/80 (1.3)	1/80 (1.3)
	Grade 2 (Moderate): $> 3.0-5.0 \times ULN$ if baseline was normal; $> 3.0-5.0 \times$ baseline if baseline was abnormal	0/82	0/80	0/80
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/82	0/80	0/80
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/82	0/80	0/80
Week 8	Grade 1 (Mild): $> ULN-3.0 \times ULN$ if baseline was normal; $1.5-3.0 \times$ baseline if baseline was abnormal	0/80	2/76 (2.6)	2/79 (2.5)
	Grade 2 (Moderate): $> 3.0-5.0 \times ULN$ if baseline was normal; $> 3.0-5.0 \times$ baseline if baseline was abnormal	0/80	0/76	0/79
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/80	0/76	0/79
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/80	0/76	0/79
Week 16	Grade 1 (Mild): $> ULN-3.0 \times ULN$ if baseline was normal; $1.5-3.0 \times$ baseline if baseline was abnormal	3/78 (3.8)	1/75 (1.3)	2/80 (2.5)
	Grade 2 (Moderate): $> 3.0-5.0 \times ULN$ if baseline was normal; $> 3.0-5.0 \times$ baseline if baseline was abnormal	0/78	1/75 (1.3)	0/80
	Grade 3 (Severe): $> 5.0-20.0 \times ULN$ if baseline was normal; $> 5.0-20.0 \times$ baseline if baseline was abnormal	0/78	0/75	0/80
	Grade 4 (Potentially life-threatening): $> 20.0 \times ULN$ if baseline was normal; $> 20.0 \times$ baseline if baseline was abnormal	0/78	0/75	0/80

Patients may have had grades 1–2 changes at more than one time point

AST aspartate aminotransferase,  $n$  total number of patients in the treatment group,  $n1/n2$  number of patients with grade/number of patients assessed at that time point,  $q2w$  every 2 weeks,  $q4w$  every 4 weeks,  $ULN$  upper limit of normal

**Supplemental Table S6e** Proportion of patients with Grades 1–4 increases in creatinine,  $n1/n2$  (%)

Time point	Grade	Placebo ( $n = 85$ )	Dupilumab 200/300 mg q2w ( $n = 82$ )	Dupilumab 300 mg q4w ( $n = 83$ )
Baseline	Grade 1 (Mild): $> ULN-1.5 \times ULN$	0/85	0/82	0/83
	Grade 2 (Moderate): $> 1.5-3.0 \times$ baseline; $> 1.5-3.0 \times ULN$	0/85	0/82	0/83
	Grade 3 (Severe): $> 3.0 \times$ baseline; $> 3.0-6.0 \times ULN$	0/85	0/82	0/83
	Grade 4 (Potentially life-threatening): $> 6.0 \times ULN$	0/85	0/82	0/83
Week 4	Grade 1 (Mild): $> ULN-1.5 \times ULN$	0/82	0/80	0/80
	Grade 2 (Moderate): $> 1.5-3.0 \times$ baseline; $> 1.5-3.0 \times ULN$	3/82 (3.7)	3/80 (3.8)	1/80 (1.3)
	Grade 3 (Severe): $> 3.0 \times$ baseline; $> 3.0-6.0 \times ULN$	0/82	0/80	0/80
	Grade 4 (Potentially life-threatening): $> 6.0 \times ULN$	0/82	0/80	0/80
Week 8	Grade 1 (Mild): $> ULN-1.5 \times ULN$	0/80	0/75	0/80
	Grade 2 (Moderate): $> 1.5-3.0 \times$ baseline; $> 1.5-3.0 \times ULN$	0/80	1/75 (1.3)	1/80 (1.3)
	Grade 3 (Severe): $> 3.0 \times$ baseline; $> 3.0-6.0 \times ULN$	0/80	0/75	0/80
	Grade 4 (Potentially life-threatening): $> 6.0 \times ULN$	0/80	0/75	0/80
Week 16	Grade 1 (Mild): $> ULN-1.5 \times ULN$	0/78	0/76	0/80
	Grade 2 (Moderate): $> 1.5-3.0 \times$ baseline; $> 1.5-3.0 \times ULN$	3/78 (3.8)	1/76 (1.3)	3/80 (3.8)
	Grade 3 (Severe): $> 3.0 \times$ baseline; $> 3.0-6.0 \times ULN$	0/78	0/76	0/80
	Grade 4 (Potentially life-threatening): $> 6.0 \times ULN$	0/78	0/76	0/80

Patients may have had grades 1–2 changes at more than one time point

$n$  total number of patients in the treatment group,  $n1/n2$  number of patients with grade/number of patients assessed at that time point,  $q2w$  every 2 weeks,  $q4w$  every 4 weeks,  $ULN$  upper limit of normal



**Supplemental Table S6f** Proportion of patients with Grades 1–4 increases in potassium,  $n1/n2$  (%)

Time point	Grade	Placebo ( $n = 85$ )	Dupilumab 200/300 mg q2w ( $n = 82$ )	Dupilumab 300 mg q4w ( $n = 83$ )
Baseline	Grade 1 (Mild): > ULN–5.5 mmol/L	0/85	2/82 (2.4)	0/83
	Grade 2 (Moderate): > 5.5–6.0 mmol/L	0/85	0/82	0/83
	Grade 3 (Severe): > 6.0–7.0 mmol/L	0/85	0/82	0/83
	Grade 4 (Potentially life-threatening): > 7.0 mmol/L	0/85	0/82	0/83
Week 4	Grade 1 (Mild): > ULN–5.5 mmol/L	1/81 (1.2)	0/81	1/81 (1.2)
	Grade 2 (Moderate): > 5.5–6.0 mmol/L	0/81	0/81	0/81
	Grade 3 (Severe): > 6.0–7.0 mmol/L	0/81	0/81	0/81
	Grade 4 (Potentially life-threatening): > 7.0 mmol/L	0/81	0/81	0/81
Week 8	Grade 1 (Mild): > ULN–5.5 mmol/L	1/80 (1.3)	0/77	0/80
	Grade 2 (Moderate): > 5.5–6.0 mmol/L	0/80	0/77	0/80
	Grade 3 (Severe): > 6.0–7.0 mmol/L	0/80	0/77	0/80
	Grade 4 (Potentially life-threatening): > 7.0 mmol/L	0/80	0/77	0/80
Week 16	Grade 1 (Mild): > ULN–5.5 mmol/L	1/78 (1.3)	1/76 (1.3)	1/80 (1.3)
	Grade 2 (Moderate): > 5.5–6.0 mmol/L	0/78	1/76 (1.3)	0/80
	Grade 3 (Severe): > 6.0–7.0 mmol/L	0/78	0/76	0/80
	Grade 4 (Potentially life-threatening): > 7.0 mmol/L	0/78	0/76	0/80

Patients may have had grades 1–2 changes at more than one time point

$n$  total number of patients in the treatment group,  $n1/n2$  number of patients with grade/number of patients assessed at that time point,  $q2w$  every 2 weeks,  $q4w$  every 4 weeks,  $ULN$  upper limit of normal

**Supplemental Table S7** Summary statistics for urinalysis laboratory parameters

Laboratory parameter	Measurement	Study week	Placebo ( <i>n</i> = 85)	Dupilumab 200/300 mg q2w ( <i>n</i> = 82)	Dupilumab 300 mg q4w ( <i>n</i> = 83)
<b>Specific gravity</b> NR (all ages) All: 1.002–1.035	Median (Q1, Q3), <i>n1</i>	BL	1.0 (1.0, 1.0), 66	1.0 (1.0, 1.0), 68	1.0 (1.0, 1.0), 63
		4	N/A	N/A	N/A
		8	N/A	N/A	N/A
		16	1.0 (1.0, 1.0), 14	1.0 (1.0, 1.0), 19	1.0 (1.0, 1.0), 17
	Mean change from baseline (± SD), <i>n1</i>	4	N/A	N/A	N/A
		8	N/A	N/A	N/A
		16	0 (0), 14	0 (0), 19	0.0 (0.0), 17
<b>pH</b> NR (all ages) All: 5.0–8.0	Median (Q1, Q3), <i>n1</i>	BL	6.0 (6.0, 6.5), 66	6.0 (6.0, 6.5), 68	6.0 (6.0, 7.0), 63
		4	N/A	N/A	N/A
		8	N/A	N/A	N/A
		16	6.3 (6.0, 6.5), 14	6.0 (6.0, 6.5), 19	6.5 (6.0, 7.0), 17
	Mean change from baseline (± SD), <i>n1</i>	4	N/A	N/A	N/A
		8	N/A	N/A	N/A
		16	0.1 (0.7), 14	−0.1 (0.6), 19	0 (0.5), 17

*BL* baseline, *n* total number of patients in the treatment group, *n1* number of patients at visit, *N/A* not available, *NR* normal range, *Q1* quartile 1, *Q3* quartile 3, *q2w* every 2 weeks, *q4w* every 4 weeks, *SD* standard deviation