

# Incidence of Flares During Maintenance Treatment With Dupilumab Monotherapy for 1 Year Is Associated With Higher Baseline CCL17/TARC

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## Learning objective

To identify the association between serum CCL17 levels and future flares in patients with AD who receive dupilumab monotherapy

## Takeaway message

Baseline serum CCL17 level was a robust predictive biomarker of flares in patients with AD

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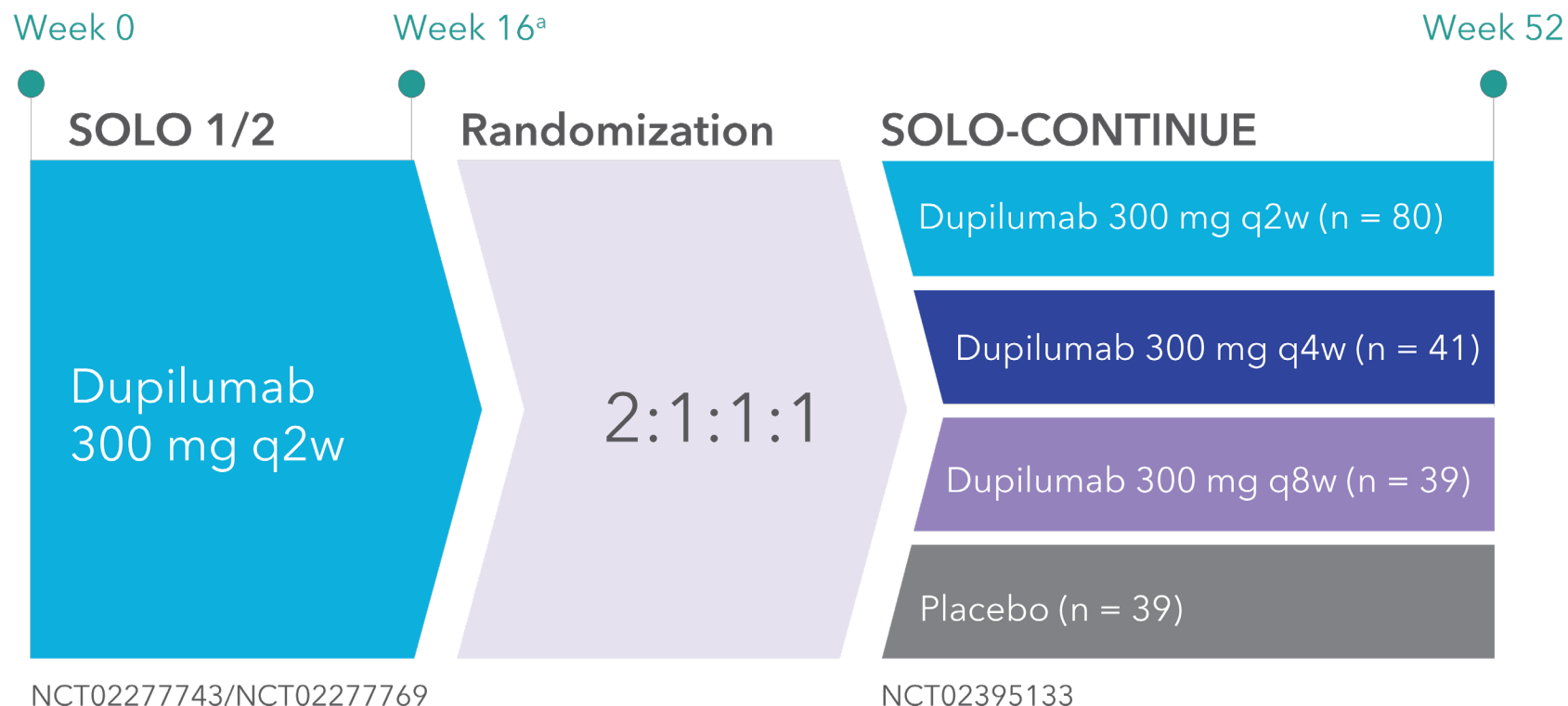
- Absence of flares (worsening of disease requiring escalation of treatment<sup>1</sup>) in patients with AD is a top priority for patients<sup>2</sup> and an important goal for physicians
- Serum CCL17/TARC is a type 2 biomarker that reflects AD severity<sup>3-5</sup> and may be predictive of response to treatment<sup>6-8</sup>



To examine the association between **serum CCL17 levels** and **flares** in patients with AD who received:

- **dupilumab monotherapy** for 1 year
- **dupilumab q2w** for 16 weeks, then **placebo** for 36 weeks

# Patients who received dupilumab q2w and achieved IGA 0/1 and/or EASI-75 at Week 16 were re-randomized to dupilumab or placebo



This post hoc analysis of adults reports median **serum CCL17** levels prior to initiating dupilumab treatment in SOLO 1/2 (**Week 0**) and after 16 weeks of dupilumab q2w (**Week 16**)

<sup>a</sup>Week 16 of SOLO 1/2 is SOLO-CONTINUE baseline.

EASI-75, ≥75% improvement from baseline in Eczema Area and Severity Index; IGA, Investigator's Global Assessment; q4w, every 4 weeks; q8w, every 8 weeks.

# Demographics and baseline disease characteristics were balanced between groups



Results

	SOLO 1/2 baseline, Week 0			
	Placebo <sup>a</sup> n = 39	Dupilumab 300 mg q2w <sup>a</sup> n = 80	Dupilumab 300 mg q4w <sup>a</sup> n = 41	Dupilumab 300 mg q8w <sup>a</sup> n = 39
<b>Demographics</b>				
Age, mean (SD), years	38.5 (15.0)	38.6 (14.8)	37.7 (17.6)	34.3 (13.8)
Male, n (%)	18 (46.2)	38 (47.5)	23 (56.1)	22 (56.4)
<b>Disease characteristics</b>				
Duration of AD, mean (SD), years	26.8 (15.9)	28.2 (16.2)	26.4 (16.1)	22.9 (10.5)
EASI, mean (SD)	29.0 (9.8)	30.5 (12.5)	27.9 (12.0)	26.9 (10.6)
BSA, mean (SD), %	48.6 (17.5)	48.3 (21.1)	47.1 (20.7)	47.3 (20.2)
Patients with ≥1 AD flare in 12 months before screening visit, n/N (%)	36/38 (94.7)	66/79 (83.5)	37/41 (90.2)	35/39 (89.7)
Number of flares in 12 months before treatment period, median	3.0	3.0	3.0	4.0

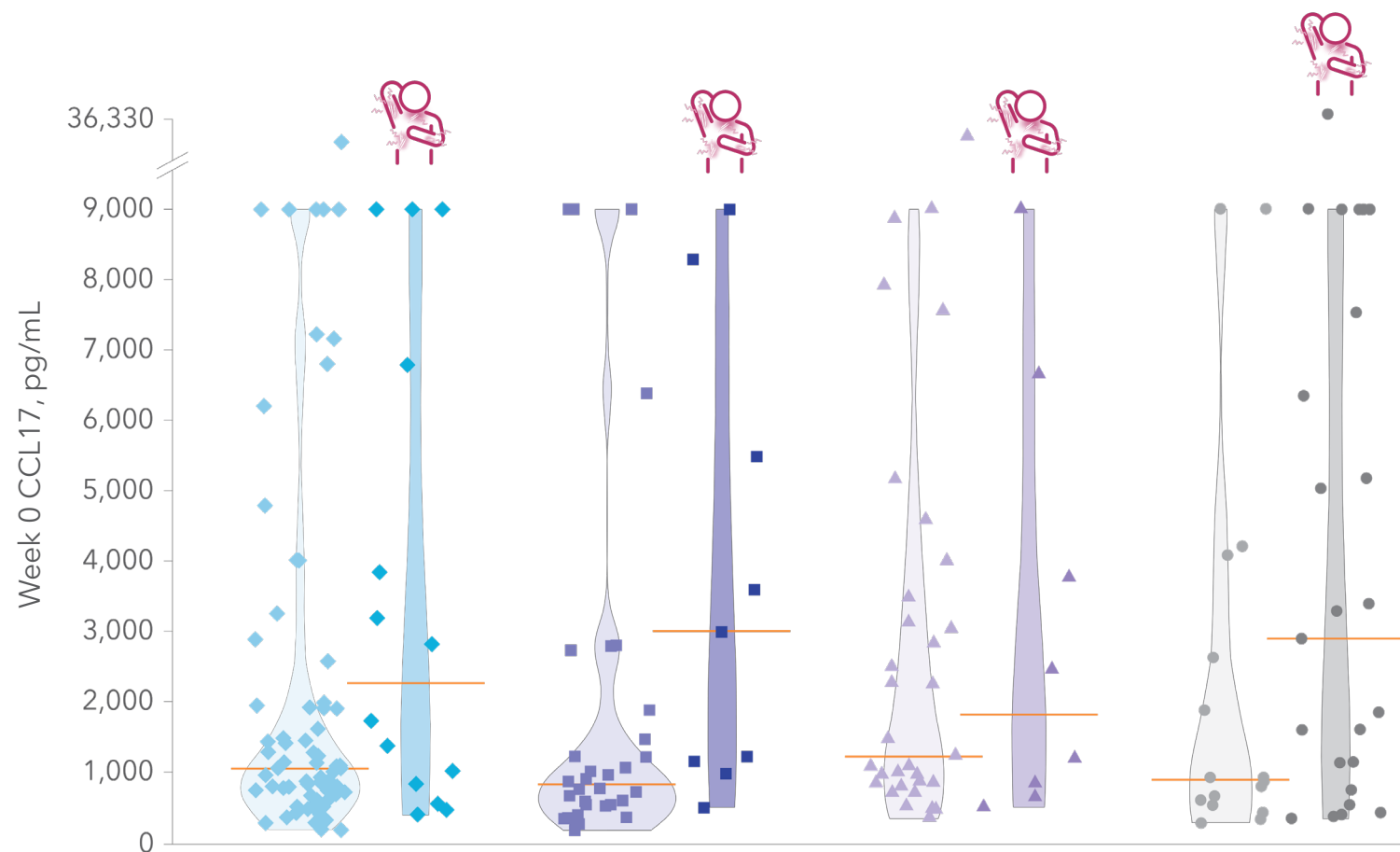
<sup>a</sup>Treatment arm in SOLO-CONTINUE. N, number of patients with data available.

<sup>a</sup>Treatment arm in SOLO-CONTINUE.  
BSA, body surface area; N, number of patients with data available; SD, standard deviation.

# Patients with $\geq 1$ future flare had greater CCL17 levels prior to initiating dupilumab vs patients with no future flares



Results



**Median Week 0 CCL17 overall:**

54 patients with  $\geq 1$  future flare  
**2,647** pg/mL

145 patients with no future flares  
**1,007** pg/mL

SOLO-CONTINUE group

Flares during SOLO-CONTINUE

Patients, n (%)<sup>a</sup>

Median CCL17, pg/mL

Min-max CCL17, pg/mL

Dupilumab q2w

no

yes

Dupilumab q4w

no

yes

Dupilumab q8w

no

yes

Placebo

no

yes

66 (82.5%) 14 (17.5%)

32 (78.0%) 9 (22.0%)

31 (79.5%) 8 (20.5%)

16 (41.0%) 23 (59.0%)

1,074 2,285

834 3,010

1,237 1,839

910 2,909

195-28,732 407-20,862

190-19,486 514-19,333

360-30,153 516-16,428

293-10,158 359-36,330

Orange lines represent median CCL17 levels per group at baseline of SOLO 1/2, Week 0. <sup>a</sup>Percentages are per treatment arm in SOLO-CONTINUE.

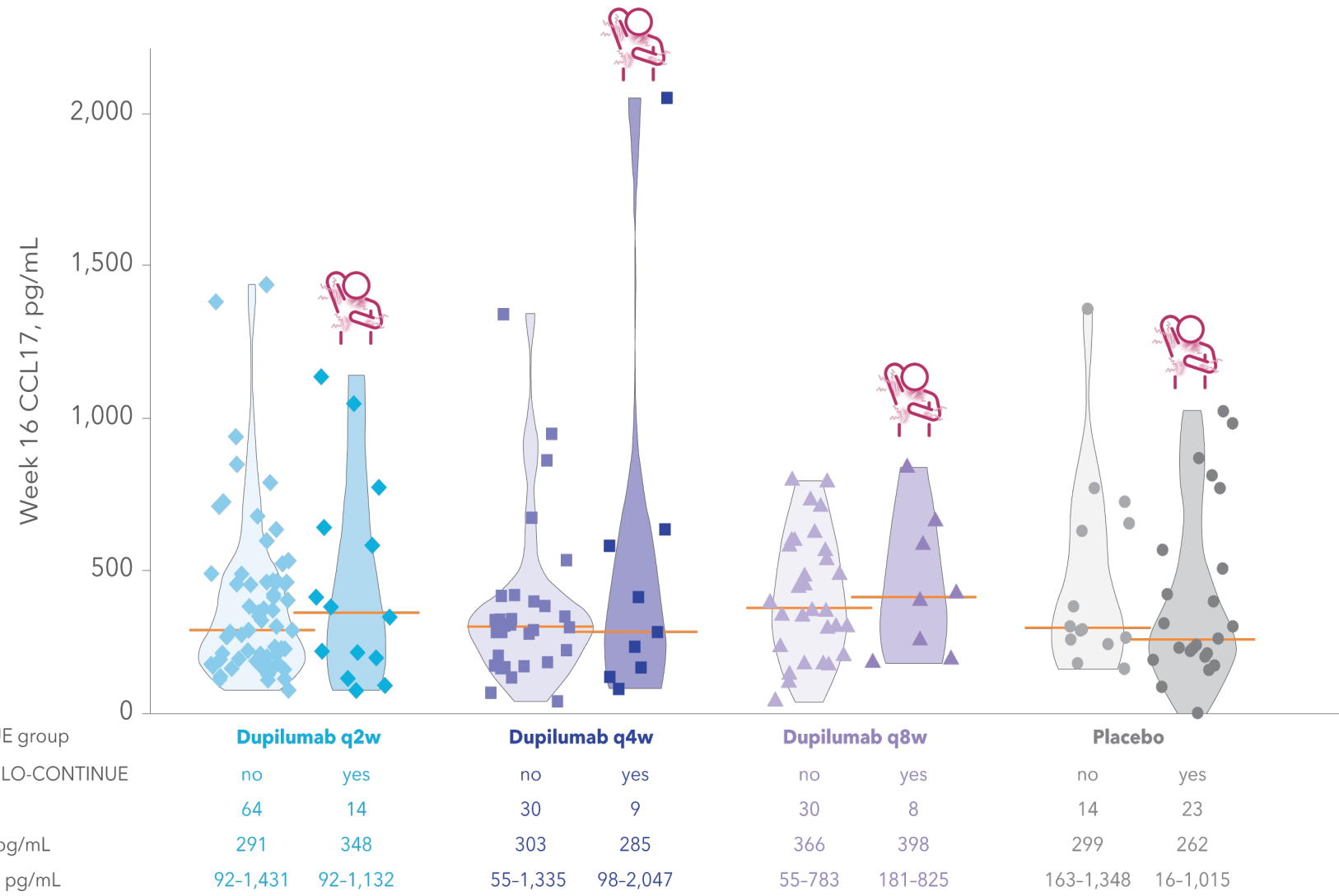


Patients with  $\geq 1$  future flare in SOLO-CONTINUE.

# After 16 weeks of dupilumab q2w, **CCL17 levels** were similar between patients with **≥1 future flare** and patients with no future flares



Results



**Median Week 16 CCL17 overall:**

54 patients with **≥1 future flare**  
**306** pg/mL

138 patients with **no future flares**  
**307** pg/mL



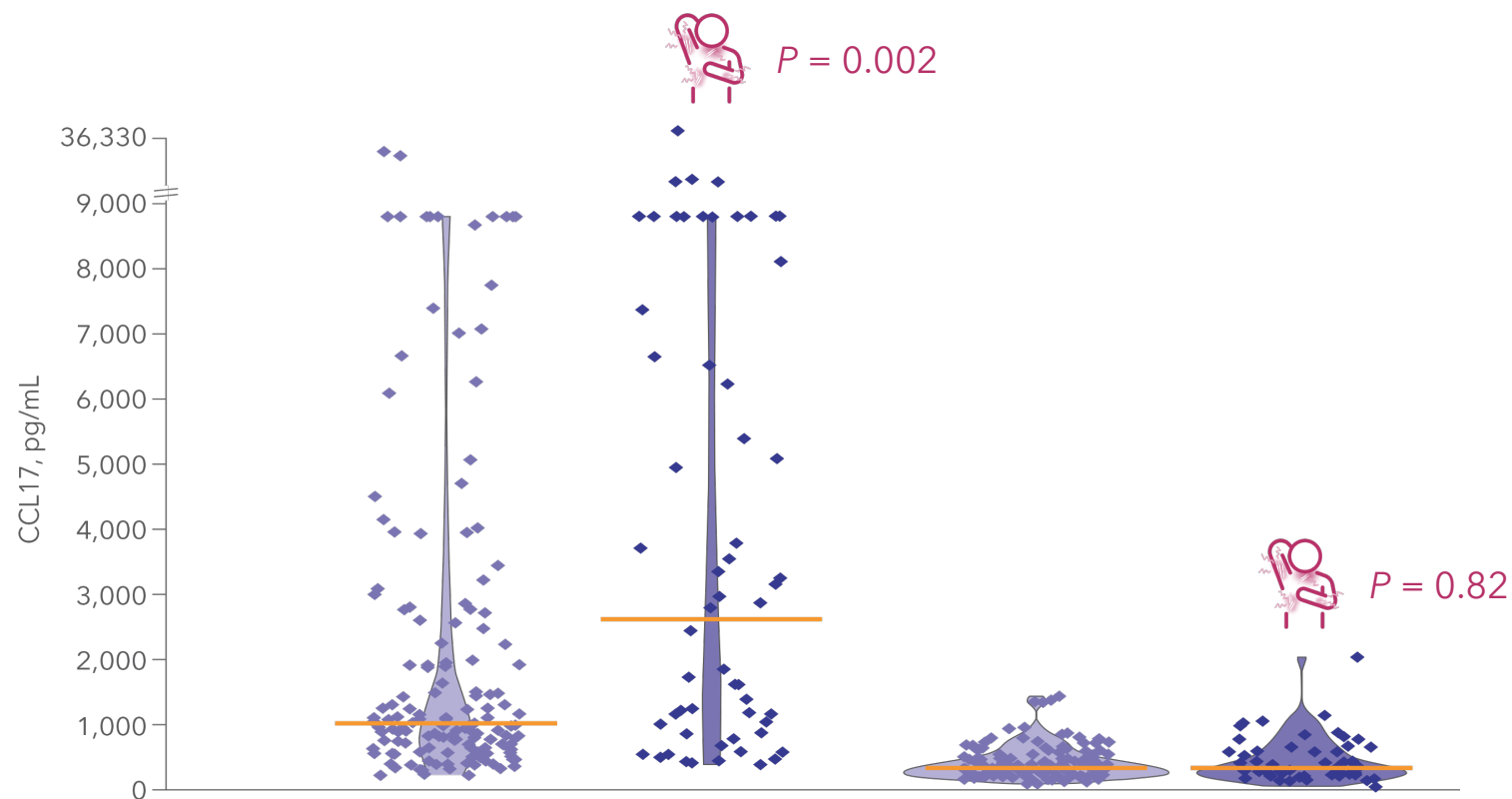
Patients with ≥1 future flare in SOLO-CONTINUE.

Orange lines represent median CCL17 levels per group at end of SOLO 1/2, Week 16.

# After 16 weeks of dupilumab q2w, median CCL17 was reduced from Week 0 to normal levels



Results



	Prior to initiating dupilumab		After 16 weeks of dupilumab q2w	
Flares during SOLO-CONTINUE	no	yes	no	yes
Patients, n	145	54	138	54
Median CCL17, pg/mL	1,007	2,647	307	306
Min-max CCL17, pg/mL	190-30,153	359-36,330	55-1,431	16-2,047

- Safety was consistent with the known dupilumab safety profile

Orange lines represent median CCL17 levels per group.  $P$  values (vs patients with no flares) were calculated using the Kruskal-Wallis test for two samples.



Patients with  $\geq 1$  future flare in SOLO-CONTINUE.



- **Baseline serum CCL17** level was a robust predictive biomarker of **flares** in patients with AD
- **Serum CCL17** level after 16 weeks of **dupilumab q2w** was not a predictive biomarker of **flares** during maintenance with or discontinuation of dupilumab