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[release-details/anaptysbio-reports-etokimab-atlas-phase-2b-clinical-trial](#) (last accessed 27 April 2022).

- 7 Ricardo-Gonzalez RR, Van Dyken SJ, Schneider C et al. Tissue signals imprint ILC2 identity with anticipatory function. *Nat Immunol* 2018; **19**:1093–99.
- 8 Nnane I, Frederick B, Yao Z et al. The first-in-human study of CNTO 7160, an anti-interleukin-33 receptor monoclonal antibody, in healthy subjects and patients with asthma or atopic dermatitis. *Br J Clin Pharmacol* 2020; **86**:2507–18.

Longer dupilumab dosing intervals in adult patients with atopic dermatitis: experience from a French multicentre retrospective cohort study

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Dear Editor, Dupilumab is a human monoclonal antibody against interleukin (IL)-4 receptor α that inhibits IL-4 and IL-13 signalling. It has been registered in France since March 2017 for the treatment of atopic dermatitis (AD) in the case of inefficacy, loss of efficacy or contraindication to ciclosporin. The treatment regimen for adult patients comprises

one 300-mg injection every 2 weeks. A longer dosing interval is feasible in some patients presenting adverse events (AEs), in order to reduce the intensity of the latter. The same strategy can also be adopted for patients with a good clinical response to reduce the total number of injections and burden of treatment. The aims of this study were to assess the strategy of longer dupilumab dosing intervals and to determine the characteristics of patients for whom it may be recommended.

We collected data from a French multicentre retrospective study conducted by the GREAT (Groupe de Recherche sur l'Eczema ATopique) network between March 2017 and July 2021. Patients had to satisfy all of the following inclusion criteria in order to be enrolled in the study: (i) adult patients diagnosed with moderate-to-severe AD receiving dupilumab, (ii) patients achieving $\geq 50\%$ improvement in Scoring Atopic Dermatitis (SCORAD), (iii) patients for whom a dupilumab dosing interval (less than one dose every 2 weeks) had been implemented for AEs and/or following a good clinical response, and (iv) patients with documented clinical follow-up after dose spacing. The data that support the findings of this study are available from the corresponding author upon reasonable request.

Table 1 Outcomes at the first (V1) and second (V2) follow-up visits

Baseline patient characteristics (n = 88)	Dose spacing for AE (n = 18)	Dose spacing for good response (n = 55)	Dose spacing for AE and good response (n = 15)
Female, n (%)	7 (39)	25 (45)	5 (33)
Age (years), median (range)	35.7 (26.6–47.1)	41.8 (30.7–55.1)	52.3 (28.8–55.3)
SCORAD before dupilumab initiation, median (range)	57 (47.6–64.8)	46.5 (36.5–56.9)	51.5 (47.2–60.2)
Duration of dupilumab at time of dose spacing (months), median (range)	8.4 (2.9–14.4)	15.6 (11.7–19.7)	11.9 (6.8–18.6)
SCORAD at time of dose spacing, median (range)	39 (26–44)	6 (0–12.8)	20.5 (6.5–21.8)
Duration of SCORAD 50 at time of dose spacing (months), median (range)	8 (5–10)	8.5 (3.8–19.2)	4 (1.5–13)
Outcomes at V1 (first visit after dose spacing injection)			
Median time between dose spacing and V1 (months), median (range)	4.4 (1.4–7.5)	6.3 (5–10.8)	6.3 (5.2–7.5)
Clinical response maintenance, n (%)	8 (47)	37 (67)	11 (73)
Nonocular AE resolution, n (%)	11 (79)	12 (67)	9 (90)
Ocular AE resolution, n (%)	10 (71)	17 (77)	9 (69)
Physician's decision following V1			
Maintenance of the same dosing intervals, n (%)	12 (67)	21 (38)	10 (67)
Further dose spacing, n (%)	0 (0)	14 (25)	2 (13)
Return to the initial dose, n (%)	3 (17)	18 (33)	1 (7)
Treatment interrupted for other reasons, n (%)	3 (17)	2 (4)	2 (13)
Outcomes at V2 (second visit after dose spacing injection)			
Time of V2 (months), median (IQR)	6.5 (5.6–12.7)	11.9 (9.2–17.3)	11.1 (7.2–15.6)
Maintenance of clinical response at V2, n (%)	9 (69)	20 (71)	8 (89)
Physician's decision following V2			
Maintenance of the same dosing intervals, n (%)	14 (78)	42 (76)	11 (73)
Further dose spacing, n (%)	0 (0)	3 (5)	2 (13)
Return to the initial dose, n (%)	1 (6)	3 (5)	1 (7)

AE, adverse event; IQR, interquartile range; SCORAD, Scoring Atopic Dermatitis; SCORAD 50, $\geq 50\%$ improvement in SCORAD.

Patients were compared according to the following criteria at the first visit after dose spacing (V1): firstly, continued clinical improvement as documented by the treating clinician, and secondly, resolution of AEs. The t-test or Wilcoxon test was used for the statistical analysis of continuous variables and the Fisher or χ^2 -test for categorical variables.

Eighty-eight (8.7%) of the 1017 patients receiving dupilumab in 11 centres across France were enrolled in the study. Dose spacing was introduced for AEs, response, and both AEs and response in 18 (20%), 55 (63%) and 15 (17%) patients, respectively. The patients' baseline characteristics are presented in Table 1. AEs comprised ocular AEs (58%), hyper-eosinophilia (17%), head and neck dermatitis (13%), headaches (7%), pain at the injection site (5%), fatigue (3%), diarrhoea (1%) and induced psoriasis (1%). Dose spacing comprised one 300-mg injection every 3 weeks or every 4 weeks for 64 (73%) and 24 (27%) patients, respectively. Maintained clinical response was noted in 56 patients (64%) at V1.



A second follow-up was performed for 50 patients (57%) (V2). Maintained clinical response was documented for 37 patients (74%) at V2. Detailed clinical outcomes at V1 and V2 are presented in Table 1. Among those patients who returned to the initial dose at V1 due to loss of response (22), 10 were followed up at V2. Eight of these re-achieved response (80%). Positive factors associated with maintained clinical response were spacing for good response [47 (84%) in the maintained response group vs. 19 (61%) in the loss-of-response group, $P = 0.034$], age of the patient [median age 45.7 years (interquartile range 32.3–55.3) for maintained response vs. 33.5 years (interquartile range 25.1–43.1) for loss of response, $P = 0.006$] and the median dose of concomitant topical corticosteroids applied in the last month (10 g for maintained response vs. 15 g for loss of response, $P = 0.016$). No significant related factor was documented for AE resolution.

This study shows that a longer dupilumab dosing interval in patients achieving clinically relevant improvement is linked to maintained efficacy in two-thirds of patients. This strategy seems to be more effective in older patients, patients with lower topical corticosteroid usage and those in whom this strategy was implemented when the patient was in clinical good response to reduce the treatment burden, rather than for an AE. In patients presenting AEs, this strategy seems to be effective in reducing their intensity.

In the LIBERTY AD SOLO-CONTINUE study, high-responding patients taking dupilumab every 4 weeks maintained $\geq 75\%$ improvement in Eczema Area and Severity Index in 58.3% of cases.¹ Our results seem to be more promising. However, the majority of patients were taking dupilumab every 3 weeks in this study (73%).

To conclude, a longer dupilumab dosing interval may be introduced for patients achieving a good clinical response and who are motivated to do so. This may prove to be an effective strategy for reducing treatment burden and the intensity of AEs. However, a randomized, prospective clinical study is needed in order to better determine the characteristics of patients for whom this strategy is most appropriate.

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A full list of affiliations is provided in Appendix S1 (see Supporting Information).

References

- 1 Worm M, Simpson EL, Thaçi D et al. Efficacy and safety of multiple dupilumab dose regimens after initial successful treatment in patients with atopic dermatitis: a randomized clinical trial. *JAMA Dermatol* 2020; **156**:131–43.

Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's website:

Appendix S1 Full list of affiliations.

Appendix S2 Conflicts of interest.

Funding sources: none.

Conflicts of interest statements can be found in [S2Appendix S2](#) (see Supporting Information).

Data availability statement: the data that support the findings of this study are available from the corresponding author upon reasonable request.

Impact of nonsegmental vitiligo on patients' health-related quality of life in the United States

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DEAR EDITOR, Worldwide prevalence of vitiligo ranges from 0.06% to 2.28% in adults and up to 2.16% in children and adolescents,¹ with nonsegmental and segmental forms identified. While segmental vitiligo (SV) involves areas of