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Table SI. Patient Global Assessment of Disease Status (PGADS) questionnaire

## Patients with atopic dermatitis

## **Patient Global Assessment of Disease Status**

Considering all the ways your atopic dermatitis has affected you, how do you feel?	
□ Poor	
☐ Fair	
☐ Good	
☐ Very Good	
☐ Excellent	

Table SII. Effectiveness and adverse events stratified by upadacitinib dosage

	Upadacitinib 15mg QD	Upadacitinib 30mg QD	p-value
Immunosuppressive therapy at baseline, No. (%)	28 (70.0)	4 (57.1)	0.501
Effectiveness			
Baseline	N=40	N=7	
Mean EASI (SD)	16.2 (10.7)	18.8 (8.9)	0.532
EASI ≤7, No. (%)	6 (15.0)	0 (0)	0.273
NRS-pruritus ≤4, No. (%)	6 (15.0)	2 (28.6)	0.383
Week 4	N=39	N=8	
Mean EASI (SD)	7.3 (5.2)	8.7 (10.0)	0.560
EASI ≤7, No. (%)	18 (46.2)	4 (50.0)	0.562
NRS-pruritus ≤4, No. (%)	18 (46.2)	5 (62.5)	0.405
Week 8	N=34	N=8	
Mean EASI (SD)	5.2 (4.2)	6.8 (3.7)	0.342
EASI ≤7, No. (%)	23 (67.6)	6 (75.0)	0.689
NRS-pruritus ≤4, No. (%)	16 (47.1)	3 (37.5)	0.737
Week 16	N=28	N=10	
Mean EASI (SD)	4.8 (3.8)	7.9 (6.1)	0.057
EASI ≤7, No. (%)	21 (75.0)	6 (60.0)	0.369
NRS-pruritus ≤4, No. (%)	21 (75.0)	5 (50.0)	0.150
Patients with adverse events <sup>a</sup> , No. (%)			0.315
Week 4	11 (27.5)	3 (37.5)	
Week 8	6 (17.6)	0 (0)	
Week 16	5 (17.9)	3 (30.0)	

<sup>&</sup>lt;sup>a</sup>Week number refers to the timepoint the adverse event started. QD: Once Daily; SD: Standard Deviation; EASI: Eczema Area and Severity Index; NRS: Numeric Rating Scale.

Table SIII. Patients with switch in upadacitinib dosage during 16 weeks of treatment

Patient number	Timepoint of switch	Reason of switch	Dose (QD)	EASI, IGA, NRS - BL	EASI, IGA, NRS - wk4	EASI, IGA, NRS - wk8	EASI, IGA, NRS – wk16	Drug discontinued
1	BL-wk4	Ineffectiveness	15 <b>→</b> 30mg	17.8, Moderate, 9	30.5 Severe, 9	NA	NA	Yes, wk4
2	Wk4	Partial response	15 <b>→</b> 30mg	45.2 Very severe, 4	22.9 Severe, 3	13.1 Moderate, 6	7.9 Moderate, 1	No
3	Wk4	Partial response	15 <b>→</b> 30mg	-	8.2 Moderate, 2	-	4.6 Moderate, 6	Yes, wk8
4	Wk8	Controlled disease	30 <b>→</b> 15mg	37.4 Severe, 2	13.4 Moderate, 1	10.6 Mild, 2	16.2 Moderate, 3	No
5	Wk8	Ineffectiveness	15 <b>→</b> 30mg	7.5 Moderate, 8	5.0 Mild, 7	7.8 Mild, 8	13.2 Moderate, 8	Yes, wk16
6	Wk8	Ineffectiveness	15 <b>→</b> 30mg	30.4 Severe, 9	8.8 Mild, 5	-	21.7 Severe, 8	Yes, wk16
7	Wk8	Partial response	15 <b>→</b> 30mg	14.6 Moderate, 9	- Mild, 6	5.0 Mild, 6	6.6 Mild, 4	No
8	Wk8	Partial response	15 <b>→</b> 30mg	6.9 Moderate, 7	7.3 Moderate, 8	9.0 Moderate, 7	3.1 Mild, 7	No

EASI: Eczema Area and Severity Index; IGA: Investigator Global Assessment; BL: Baseline; Wk: Week; QD: Once Daily; NA: Not Applicable due to treatment discontinuation. –Not measured.

Table SIV. AD disease course in patients with upadacitinib treatment who previous had inadequate response to both baricitinib and dupilumab treatment

Patient number	EASI, IGA, NRS - BL	EASI, IGA, NRS - wk4	EASI, IGA, NRS - wk8	EASI, IGA, NRS – wk16	Drug discontinued
1	7.8	-	-	2.2	No
	Severe, 7			Almost clear, 3	
2	13.6	2.5	6.9	3.9	No
	Severe, 8	Almost clear, 4	Mild, 6	Mild, 6	
3	7.5	5.0	7.8	13.2	Yes, due to ineffectiveness at wk16
	Moderate, 8	Mild, 7	Mild, 8	Moderate, 8	
4	20.9	8.6	8.4	8.0	No
	Severe, 8	Mild, 6	Mild, 3	Mild, 3	
5	-	1.5	-	6.9	No
		Mild, 5		Mild, 1	
6	27.3	11.1	7.4	8.6	No
	Severe, 10	Moderate, 6	Mild, 5	Moderate, 5	
7	6.9	7.3	9.0	3.1	No
	Moderate, 7	Moderate, 8	Moderate, 7	Mild, 7	

AD: Atopic Dermatitis; EASI: Eczema Area and Severity Index; IGA: Investigator Global Assessment; BL: Baseline; Wk: Week. –Not measured.