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Table S1a. Differentiating on previous biologic exposure after 3 months.									
	All treatments			Ixekizumab			Secukinumab		
	Exposure to an IL-17A inhibitor N = 115	Exposure to (an)other biologic(s) N = 441	P-value	Exposure to an IL-17A inhibitor N = 91	Exposure to (an)other biologic(s) N = 54	P-value	Exposure to an IL-17A inhibitor N = 24	Exposure to (an)other biologic(s) N = 387	P-value
As observed									
PASI≤4	47 (85.5)	237 (85.9)	0.94	-	-	0.50*	-	-	1.00*
PASI≤2	40 (72.7)	198 (71.7)	0.88	35 (74.5)	28 (77.8)	0.73	5 (62.5)	170 (70.8)	0.70*
PASI=0	22 (40.0)	119 (43.1)	0.67	19 (40.4)	18 (50.0)	0.38	3 (37.5)	101 (42.1)	1.00*
PASI75	30 (60.0)	160 (62.8)	0.71	27 (62.8)	24 (75.0)	0.26	3 (42.9)	136 (70.0)	0.44*
PASI90	25 (50.0)	136 (53.3)	0.67	22 (51.2)	22 (68.8)	0.13	3 (42.9)	114 (51.1)	0.72*
PASI100	22 (44.0)	119 (46.7)	0.73	19 (44.2)	18 (56.3)	0.30	3 (42.9)	101 (45.3)	1.00*
DLQI01	13 (25.0)	87 (35.8)	0.14	-	-	0.07	-	-	0.43*
Last observation carried forward									
PASI≤4	69 (72.9)	306 (74.8)	0.70	59 (73.8)	40 (80.0)	0.42	11 (68.8)	266 (74.1)	0.63
PASI≤2	56 (58.3)	241 (58.9)	0.92	47 (58.8)	31 (62.0)	0.71	9 (56.3)	210 (58.5)	0.86
PASI=0	32 (33.3)	135 (33.0)	0.95	26 (32.5)	18 (36.0)	0.68	6 (37.5)	117 (32.6)	0.68
PASI75	40 (44.0)	176 (45.6)	0.78	34 (44.7)	24 (52.2)	0.43	6 (40.0)	152 (44.7)	0.72
PASI90	35 (38.5)	152 (39.4)	0.87	29 (38.2)	22 (47.8)	0.32	6 (40.0)	130 (38.2)	0.89
PASI100	32 (35.6)	135 (35.0)	0.92	26 (34.2)	18 (39.1)	0.58	6 (40.0)	117 (34.4)	0.66
DLQI01	16 (32.0)	95 (44.6)	0.10	-	-	0.040	-	-	0.70*
Non responder imputation									
PASI≤4	47 (40.9)	237 (53.7)	0.014	40 (44.0)	33 (61.1)	0.046	7 (29.2)	204 (52.7)	0.025
PASI≤2	40 (34.8)	198 (44.9)	0.05	35 (38.5)	28 (51.9)	0.12	5 (20.8)	170 (43.9)	0.026
PASI=0	22 (19.1)	119 (27.0)	0.08	19 (20.9)	18 (33.3)	0.10	3 (12.5)	101 (26.1)	0.16*
PASI75	30 (26.1)	160 (36.3)	0.040	27 (29.7)	24 (44.4)	0.07	3 (12.5)	136 (35.1)	0.025*
PASI90	25 (21.7)	136 (30.8)	0.05	22 (24.2)	22 (40.7)	0.036	3 (12.5)	114 (29.5)	0.10*
PASI100	22 (19.1)	119 (27.0)	0.08	19 (20.9)	18 (33.3)	0.10	3 (12.5)	101 (26.1)	0.16*
DLQI01	13 (11.3)	87 (19.7)	0.036	-	-	0.05	-	-	0.10*
Modified as observed									
PASI≤4	47 (75.8)	237 (78.7)	0.61	40 (78.4)	33 (86.8)	0.31	7 (63.6)	204 (77.6)	0.28*
PASI≤2	40 (64.5)	198 (65.8)	0.85	35 (68.6)	28 (73.7)	0.60	5 (45.5)	170 (64.6)	0.19
PASI=0	22 (35.5)	119 (39.5)	0.55	19 (37.3)	18 (47.4)	0.34	3 (27.3)	101 (38.4)	0.54*
PASI75	30 (52.6)	160 (57.1)	0.53	27 (57.5)	24 (70.6)	0.23	3 (30.0)	136 (55.3)	0.19*
PASI90	25 (43.9)	136 (48.6)	0.52	22 (46.8)	22 (64.7)	0.11	3 (30.0)	114 (46.3)	0.35*
PASI100	22 (38.6)	119 (42.5)	0.59	19 (40.4)	18 (52.9)	0.26	3 (30.0)	101 (41.1)	0.74*
DLQI01	13 (22.0)	87 (32.3)	0.12	-	-	0.07	-	-	0.29*
Modified last observation carried forward									
PASI≤4	68 (68.0)	295 (71.3)	0.52	59 (71.1)	38 (76.0)	0.54	9 (52.9)	257 (70.6)	0.12
PASI≤2	54 (54.0)	236 (57.0)	0.59	47 (56.6)	30 (60.0)	0.70	7 (41.2)	206 (56.6)	0.21
PASI=0	31 (31.0)	133 (32.1)	0.83	26 (31.3)	18 (36.0)	0.58	5 (29.4)	115 (31.6)	0.85
PASI75	39 (41.1)	174 (44.4)	0.56	34 (43.0)	24 (52.2)	0.32	5 (31.3)	150 (43.4)	0.34
PASI90	34 (35.8)	150 (38.3)	0.66	29 (36.7)	22 (47.8)	0.22	5 (31.3)	128 (37.0)	0.64
PASI100	31 (32.6)	133 (33.9)	0.81	26 (32.9)	18 (39.1)	0.48	5 (31.3)	115 (33.2)	0.87
DLQI01	16 (28.1)	99 (41.4)	0.06	-	-	0.041	-	-	0.32*

Abbreviations: PASI, psoriasis area severity index; DLQI, dermatology life quality index; n, number of patients

*Fishers exact test

Values are not shown if one group had <3 observations. P-values <0.05 are marked in bold.

PASI≤4, patients having an absolute PASI≤4; PASI≤2, patients having an absolute PASI≤2; PASI=0, patients having an absolute PASI=0; PASI75, patients having a relative reduction in PASI of ≥75%; PASI90, patients having a relative reduction in PASI of ≥90%; PASI100, patients having a relative reduction in PASI of 100%; DLQI01, patients achieving DLQI=0/1.

Modified imputation: patients who stopped treatment before 3 months due to lack of efficacy were considered non-responders

Table S1b. Differentiating on previous biologic exposure after 6 months.									
	All treatments			Ixekizumab			Secukinumab		
	Exposure to an IL-17A inhibitor N = 103	Exposure to (an)other biologic(s) N = 383	P-value	Exposure to an IL-17A inhibitor N = 84	Exposure to (an)other biologic(s) N = 49	P-value	Exposure to an IL-17A inhibitor N = 19	Exposure to (an)other biologic(s) N = 334	P-value
As observed									
PASI≤4	40 (90.9)	125 (81.7)	0.14	-	-	0.77	-	-	0.59*
PASI≤2	36 (81.8)	109 (71.2)	0.16	-	-	0.52	-	-	0.18*
PASI=0	18 (40.9)	63 (41.2)	0.97	-	-	0.46	-	-	1.00*
PASI75	26 (68.4)	83 (59.3)	0.31	-	-	0.57	-	-	1.00*
PASI90	21 (55.3)	70 (50.0)	0.56	-	-	0.65	-	-	0.62*
PASI100	18 (47.4)	63 (45.0)	0.79	-	-	0.33	-	-	0.58*
DLQI01	15 (39.5)	47 (33.8)	0.52	-	-	0.29	-	-	0.42*
Last observation carried forward									
PASI≤4	78 (83.9)	297 (79.8)	0.38	69 (87.3)	39 (79.6)	0.24	9 (64.3)	258 (79.9)	0.16
PASI≤2	66 (70.1)	256 (68.8)	0.69	57 (73.4)	35 (71.4)	0.81	8 (57.1)	221 (68.4)	0.38
PASI=0	37 (39.8)	151 (40.6)	0.89	32 (41.8)	21 (42.9)	0.90	4 (28.6)	130 (40.3)	0.58*
PASI75	48 (58.5)	194 (56.6)	0.75	44 (62.0)	27 (62.8)	0.93	4 (36.4)	167 (55.7)	0.23*
PASI90	40 (48.8)	169 (49.3)	0.94	36 (50.7)	25 (58.1)	0.44	4 (36.4)	144 (48.0)	0.55*
PASI100	37 (45.1)	151 (44.0)	0.86	33 (46.5)	21 (48.8)	0.81	4 (36.4)	130 (43.3)	0.76*
DLQI01	26 (42.6)	115 (46.8)	0.56	-	-	0.25	-	-	0.69*
Non responder imputation									
PASI≤4	40 (38.8)	125 (32.6)	0.24	34 (40.5)	13 (26.5)	0.10	6 (31.6)	112 (33.5)	0.86
PASI≤2	36 (35.0)	109 (28.5)	0.20	30 (35.7)	13 (26.5)	0.27	6 (31.6)	96 (28.7)	0.79
PASI=0	18 (17.5)	63 (16.5)	0.80	-	-	0.69	-	-	0.75*
PASI75	26 (25.2)	83 (21.7)	0.44	-	-	0.30	-	-	0.39*
PASI90	21 (20.4)	70 (18.3)	0.63	-	-	0.38	-	-	0.55*
PASI100	18 (17.5)	63 (16.5)	0.80	-	-	0.69	-	-	0.75*
DLQI01	15 (15.0)	47 (12.3)	0.54	-	-	0.17	-	-	0.49*
Modified as observed									
PASI≤4	40 (85.1)	125 (71.0)	0.05	34 (83.0)	13 (65.0)	0.12	6 (100)	112 (71.8)	0.19*
PASI≤2	36 (76.6)	109 (61.9)	0.06	30 (73.2)	13 (65.0)	0.51	6 (100)	96 (61.5)	0.09*
PASI=0	18 (38.3)	63 (35.8)	0.75	-	-	0.94	-	-	1.00*
PASI75	26 (63.4)	83 (50.9)	0.15	-	-	0.59	-	-	1.00*
PASI90	21 (51.2)	70 (42.9)	0.34	-	-	0.70	-	-	0.58*
PASI100	18 (43.9)	63 (38.7)	0.54	-	-	0.87	-	-	0.56*
DLQI01	15 (36.6)	47 (29.2)	0.36	-	-	0.14	-	-	0.67*
Modified last observation carried forward									
PASI≤4	75 (80.7)	284 (76.3)	0.38	66 (83.5)	35 (71.4)	0.10	9 (64.3)	249 (77.1)	0.27
PASI≤2	65 (69.9)	244 (65.6)	0.43	57 (72.2)	32 (65.3)	0.41	8 (57.1)	212 (65.6)	0.51
PASI=0	36 (38.7)	147 (39.5)	0.89	32 (40.5)	19 (38.8)	0.85	4 (28.6)	128 (39.6)	0.58*
PASI75	47 (57.3)	187 (54.4)	0.63	43 (60.6)	25 (58.1)	0.80	4 (36.4)	162 (53.8)	0.36*
PASI90	39 (47.6)	163 (47.4)	0.98	35 (49.3)	23 (53.5)	0.66	4 (36.4)	140 (46.5)	0.56*
PASI100	36 (43.9)	147 (42.7)	0.85	32 (45.1)	19 (44.2)	0.93	4 (36.4)	128 (42.5)	0.77*
DLQI01	25 (41.0)	118 (45.6)	0.52	-	-	0.63	-	-	0.69*
Abbreviations: PASI, psoriasis area severity index; DLQI, dermatology life quality index; n, number of patients									
*Fishers exact test									
Values are not shown if one group had <3 observations. P-values <0.05 are marked in bold.									
PASI≤4, patients having an absolute PASI≤4; PASI≤2, patients having an absolute PASI≤2; PASI=0, patients having an absolute PASI=0; PASI75, patients having a relative reduction in PASI of ≥75%; PASI90, patients having a relative reduction in PASI of ≥90%; PASI100, patients having a relative reduction in PASI of 100%; DLQI01, patients achieving DLQI=0/1.									
Modified imputation: patients who stopped treatment before 6 months due to lack of efficacy were considered non-responders									

Table S1c. Differentiating on previous biologic exposure after 12 months.

	All treatments			Ixekizumab			Secukinumab		
	Exposure to an IL-17A inhibitor N = 87	Exposure to (an)other biologic(s) N = 315	P-value	Exposure to an IL-17A inhibitor N = 73	Exposure to (an)other biologic(s) N = 38	P-value	Exposure to an IL-17A inhibitor N = 14	Exposure to (an)other biologic(s) N = 277	P-value
As observed									
PASI≤4	31 (86.1)	165 (80.9)	0.45	-	-	0.67*	-	-	1.00*
PASI≤2	27 (75.0)	127 (62.3)	0.14	-	-	0.64	-	-	0.41*
PASI=0	13 (36.1)	79 (38.7)	0.77	-	-	0.83	-	-	1.00*
PASI75	18 (66.7)	107 (59.4)	0.47	15 (63.5)	8 (61.5)	0.95	3 (100)	99 (59.3)	0.28*
PASI90	15 (55.6)	86 (47.8)	0.45	12 (50.0)	7 (53.9)	0.82	3 (100)	79 (47.3)	0.11*
PASI100	13 (48.2)	79 (43.9)	0.68	-	-	0.99	-	-	0.58*
DLQI01	10 (29.4)	61 (34.1)	0.60	7 (25.9)	4 (36.4)	0.70*	3 (42.9)	47 (33.9)	0.69*
Last observation carried forward									
PASI≤4	68 (85.0)	250 (79.9)	0.30	60 (87.0)	29 (76.3)	0.16	8 (72.7)	221 (80.4)	0.46*
PASI≤2	60 (75.0)	203 (64.9)	0.09	53 (76.8)	26 (68.4)	0.34	7 (63.6)	177 (64.4)	1.00*
PASI=0	30 (37.5)	123 (39.3)	0.77	27 (39.1)	18 (47.4)	0.41	3 (27.3)	105 (38.2)	0.54*
PASI75	40 (60.6)	162 (58.3)	0.73	36 (61.0)	22 (66.7)	0.59	4 (57.1)	140 (57.1)	1.00*
PASI90	33 (50.0)	136 (48.9)	0.87	29 (49.2)	21 (63.6)	0.18	4 (57.1)	115 (46.9)	0.71*
PASI100	30 (45.5)	123 (44.2)	0.86	27 (45.8)	18 (54.6)	0.42	3 (42.9)	105 (42.9)	1.00*
DLQI01	26 (48.2)	105 (46.3)	0.80	22 (46.8)	15 (57.7)	0.37	4 (57.1)	90 (44.8)	0.70*
Non responder imputation									
PASI≤4	31 (35.6)	165 (52.4)	0.0057	26 (35.6)	12 (31.6)	0.67	5 (35.7)	153 (55.2)	0.15
PASI≤2	27 (31.0)	127 (40.3)	0.11	22 (30.1)	10 (26.3)	0.67	5 (35.7)	117 (42.2)	0.69
PASI=0	13 (15.0)	79 (25.1)	0.046	-	-	0.92	-	-	0.53
PASI75	18 (20.7)	107 (34.0)	0.0018	15 (20.6)	8 (21.1)	0.95	3 (21.4)	99 (35.7)	0.39
PASI90	15 (17.2)	86 (27.3)	0.06	12 (16.4)	7 (18.4)	0.79	3 (21.4)	79 (28.5)	0.76
PASI100	13 (15.0)	79 (25.1)	0.046	-	-	0.92	-	-	0.53*
DLQI01	10 (11.5)	61 (19.4)	0.09	7 (9.6)	4 (10.5)	0.88	3 (21.4)	57 (20.6)	1.00*
Modified as observed									
PASI≤4	31 (72.1)	165 (72.7)	0.94	-	-	0.90	-	-	1.00*
PASI≤2	27 (62.8)	127 (56.0)	0.41	-	-	0.87	-	-	0.47*
PASI=0	13 (30.2)	79 (34.8)	0.56	-	-	0.73	-	-	1.00*
PASI75	18 (53.0)	107 (52.7)	0.98	-	-	0.83	-	-	0.62*
PASI90	15 (44.1)	86 (42.4)	0.85	-	-	0.67	-	-	0.31*
PASI100	13 (38.2)	79 (38.9)	0.94	-	-	0.83	-	-	0.64*
DLQI01	10 (23.8)	61 (29.8)	0.44	7 (20.6)	4 (28.6)	0.71*	3 (37.5)	57 (29.4)	0.70*
Modified last observation carried forward									
PASI≤4	63 (77.8)	234 (74.5)	0.55	55 (79.7)	27 (76.3)	0.31	8 (66.7)	207 (75.0)	0.51*
PASI≤2	56 (69.1)	189 (60.2)	0.14	49 (71.0)	24 (63.2)	0.40	7 (58.3)	165 (59.8)	0.92
PASI=0	29 (35.8)	115 (36.6)	0.89	26 (37.7)	16 (42.1)	0.65	3 (25.0)	99 (35.9)	0.55*
PASI75	39 (58.2)	152 (54.1)	0.54	35 (59.3)	20 (60.1)	0.90	4 (50.0)	132 (53.2)	1.00*
PASI90	32 (47.8)	128 (45.6)	0.74	28 (47.5)	19 (57.6)	0.35	4 (50.0)	109 (44.0)	0.73*
PASI100	29 (43.3)	115 (40.9)	0.72	26 (44.1)	16 (48.5)	0.68	3 (37.5)	99 (39.9)	1.00*
DLQI01	25 (43.1)	102 (43.4)	0.97	21 (42.0)	13 (50.0)	0.51	4 (50.0)	89 (42.6)	0.73*
Abbreviations: PASI, psoriasis area severity index; DLQI, dermatology life quality index; n, number of patients									
*Fishers exact test									
Values are not shown if one group had <3 observations. P-values <0.05 are marked in bold.									
PASI≤4, patients having an absolute PASI≤4; PASI≤2, patients having an absolute PASI≤2; PASI=0, patients having an absolute PASI=0; PASI75, patients having a relative reduction in PASI of ≥75%; PASI90, patients having a relative reduction in PASI of ≥90%; PASI100, patients having a relative reduction in PASI of 100%; DLQI01, patients achieving DLQI=0/1.									
Modified imputation: patients who stopped treatment before 12 months due to lack of efficacy were considered non-responders									

Table S11a. Differentiating on reason for discontinuation of previous IL-17A inhibitor after 3 months.									
	All treatments			Ixekizumab			Secukinumab		
	Treatment failure N = 89	Reasons other than treatment failure N = 26	P-value	Treatment failure N = 80	Reasons other than treatment failure N = 11	P-value	Treatment failure N = 9	Reasons other than treatment failure N = 15	P-value
As observed									
PASI≤4	-	-	0.67*	-	-	0.57*	-	-	1.00*
PASI≤2	-	-	0.15*	-	-	0.32*	-	-	0.11*
PASI=0	18 (41.9)	4 (33.3)	0.74*	-	-	0.38*	-	-	0.46*
PASI75	24 (60.0)	6 (60.0)	1.00*	-	-	1.00*	-	-	0.43*
PASI90	20 (50.0)	5 (50.0)	1.00	-	-	0.66*	-	-	0.43*
PASI100	18 (45.0)	4 (40.0)	1.00*	-	-	0.36*	-	-	0.43*
DLQI01	9 (22.5)	4 (33.3)	0.46*	-	-	0.36*	-	-	1.00*
Last observation carried forward									
PASI≤4	57 (77.0)	13 (59.1)	0.10	-	-	0.12	-	-	1.00*
PASI≤2	43 (58.1)	13 (59.1)	0.93	-	-	0.76	-	-	0.60*
PASI=0	26 (35.1)	6 (27.3)	0.49	-	-	0.09*	-	-	0.59*
PASI75	32 (45.1)	8 (40.0)	0.69	-	-	0.50*	-	-	0.58*
PASI90	28 (39.4)	7 (35.0)	0.72	-	-	0.30*	-	-	0.58*
PASI100	26 (36.6)	6 (30.0)	0.58	-	-	0.15*	-	-	0.58*
DLQI01	11 (28.2)	5 (45.5)	0.28	-	-	0.37*	-	-	1.00*
Non responder imputation									
PASI≤4	36 (40.5)	11 (42.3)	0.86	-	-	0.45	-	-	0.12*
PASI≤2	29 (33.3)	11 (42.3)	0.40	-	-	0.24	-	-	0.27*
PASI=0	18 (20.2)	4 (15.4)	0.78*	-	-	0.45*	-	-	0.27*
PASI75	24 (27.0)	6 (23.1)	0.69	-	-	1.00*	-	-	0.27*
PASI90	20 (22.5)	5 (19.2)	0.72	-	-	1.00*	-	-	0.27*
PASI100	18 (20.2)	4 (15.4)	0.78*	-	-	0.45*	-	-	0.27*
DLQI01	9 (10.1)	4 (15.4)	0.49*	-	-	0.16*	-	-	1.00*
Modified as observed									
PASI≤4	36 (75.0)	11 (78.6)	0.78	-	-	1.00*	-	-	0.06*
PASI≤2	29 (60.4)	11 (78.6)	0.21	-	-	0.41*	-	-	0.24*
PASI=0	18 (37.5)	4 (28.6)	0.75*	-	-	0.24*	-	-	0.20*
PASI75	24 (53.3)	6 (50.0)	0.84	-	-	1.00*	-	-	0.20*
PASI90	20 (44.4)	5 (41.7)	0.86	-	-	0.67*	-	-	0.20*
PASI100	18 (40.0)	4 (33.3)	0.75*	-	-	0.38*	-	-	0.20*
DLQI01	9 (20.0)	4 (28.6)	0.48*	-	-	0.39*	-	-	1.00*
Modified last observation carried forward									
PASI≤4	56 (71.8)	12 (54.6)	0.13	-	-	0.19	-	-	1.00*
PASI≤2	42 (53.9)	12 (54.6)	0.95	-	-	0.88	-	-	0.30*
PASI=0	26 (33.3)	5 (22.7)	0.34	-	-	0.16*	-	-	0.60*
PASI75	32 (42.7)	7 (35.0)	0.54	-	-	0.50*	-	-	0.59*
PASI90	28 (37.3)	6 (30.0)	0.61	-	-	0.31*	-	-	0.59*
PASI100	26 (34.7)	5 (25.0)	0.41	-	-	0.15*	-	-	0.59*
DLQI01	11 (25.0)	5 (38.5)	0.34	-	-	0.41*	-	-	0.47*
Abbreviations: PASI, psoriasis area severity index; DLQI, dermatology life quality index; n, number of patients									
*Fishers exact test									
Values are not shown if one group had <3 observations. P-values <0.05 are marked in bold.									
PASI≤4, patients having an absolute PASI≤4; PASI≤2, patients having an absolute PASI≤2; PASI=0, patients having an absolute PASI=0; PASI75, patients having a relative reduction in PASI of ≥75%; PASI90, patients having a relative reduction in PASI of ≥90%; PASI100, patients having a relative reduction in PASI of 100%; DLQI01, patients achieving DLQI=0/1.									
Modified imputation: patients who stopped treatment before 3 months due to lack of efficacy were considered non-responders									

Table SIIb. Differentiating on reason for discontinuation of previous IL-17A inhibitor after 6 months.									
	All treatments			Ixekizumab			Secukinumab		
	Treatment failure N = 79	Reasons other than treatment failure N = 24	P-value	Treatment failure N = 73	Reasons other than treatment failure N = 11	P-value	Treatment failure N = 6	Reasons other than treatment failure N = 13	P-value
As observed									
PASI≤4	-	-	1.00*	-	-	0.45*	-	-	-
PASI≤2	-	-	0.66*	-	-	1.00*	-	-	-
PASI=0	14 (42.4)	4 (36.4)	1.00*	-	-	1.00*	-	-	-
PASI75	-	-	1.00*	-	-	1.00*	-	-	-
PASI90	16 (53.3)	5 (62.5)	0.71*	-	-	1.00*	-	-	-
PASI100	14 (46.7)	4 (50.0)	1.00*	-	-	1.00*	-	-	-
DLQI01	12 (44.4)	3 (27.3)	0.47*	-	-	1.00*	-	-	-
Last observation carried forward									
PASI≤4	60 (87.5)	15 (71.4)	0.08	-	-	0.61*	-	-	1.00*
PASI≤2	51 (70.8)	15 (71.4)	0.96	-	-	1.00*	-	-	0.54*
PASI=0	31 (43.1)	6 (28.6)	0.28	-	-	0.51*	-	-	1.00*
PASI75	39 (60.0)	9 (52.9)	0.60	-	-	1.00*	-	-	1.00*
PASI90	32 (50.8)	7 (41.2)	0.48	-	-	0.74*	-	-	1.00*
PASI100	31 (47.7)	6 (35.3)	0.36	-	-	0.49*	-	-	1.00*
DLQI01	20 (41.7)	6 (46.2)	0.77	-	-	0.72*	-	-	1.00*
Non responder imputation									
PASI≤4	30 (38.0)	10 (41.7)	0.75	-	-	1.00*	-	-	0.13*
PASI≤2	26 (32.9)	10 (41.7)	0.43	-	-	0.74*	-	-	0.13*
PASI=0	14 (17.7)	4 (16.7)	1.00*	-	-	1.00*	-	-	1.00*
PASI75	20 (25.3)	6 (25.0)	0.98	-	-	0.46*	-	-	1.00*
PASI90	16 (20.3)	5 (20.8)	0.95	-	-	0.69*	-	-	1.00*
PASI100	14 (17.7)	4 (16.7)	1.00*	-	-	1.00*	-	-	1.00*
DLQI01	12 (15.2)	3 (12.5)	1.00*	-	-	0.67*	-	-	1.00*
Modified as observed									
PASI≤4	-	-	1.00*	-	-	0.27*	-	-	-
PASI≤2	-	-	0.70*	-	-	0.65*	-	-	-
PASI=0	14 (40.0)	4 (33.3)	0.74*	-	-	1.00*	-	-	-
PASI75	20 (62.5)	6 (66.7)	1.00*	-	-	1.00*	-	-	-
PASI90	16 (50.0)	5 (55.6)	1.00*	-	-	1.00*	-	-	-
PASI100	14 (43.8)	4 (44.4)	1.00*	-	-	1.00*	-	-	-
DLQI01	12 (41.4)	3 (25.0)	0.48*	-	-	1.00*	-	-	-
Modified last observation carried forward									
PASI≤4	63 (87.5)	15 (71.4)	0.08	-	-	0.36*	-	-	1.00*
PASI≤2	51 (70.8)	15 (71.4)	0.96	-	-	1.00*	-	-	0.54*
PASI=0	31 (43.1)	6 (28.6)	0.23	-	-	0.19*	-	-	1.00*
PASI75	39 (60.0)	8 (47.1)	0.34	-	-	0.73*	-	-	1.00*
PASI90	33 (50.8)	6 (35.3)	0.26	-	-	0.48*	-	-	1.00*
PASI100	31 (47.7)	5 (29.4)	0.18	-	-	0.17*	-	-	1.00*
DLQI01	20 (41.7)	5 (38.5)	0.83	-	-	1.00*	-	-	1.00*

Abbreviations: PASI, psoriasis area severity index; DLQI, dermatology life quality index; n, number of patients

*Fishers exact test

Values are not shown if one group had <3 observations. P-values <0.05 are marked in bold.

PASI≤4, patients having an absolute PASI≤4; PASI≤2, patients having an absolute PASI≤2; PASI=0, patients having an absolute PASI=0; PASI75, patients having a relative reduction in PASI of ≥75%; PASI90, patients having a relative reduction in PASI of ≥90%; PASI100, patients having a relative reduction in PASI of 100%; DLQI01, patients achieving DLQI=0/1.

Modified imputation: patients who stopped treatment before 6 months due to lack of efficacy were considered non-responders

Table SIIc. Differentiating on reason for discontinuation of previous IL-17A inhibitor after 12 months.									
	All treatments			Ixekizumab			Secukinumab		
	Treatment failure N = 69	Reasons other than treatment failure N = 18	P-value	Treatment failure N > 65 [#]	Reasons other than treatment failure N > 4 [#]	P-value	Treatment failure N < 3 [#]	Reasons other than treatment failure N > 8 [#]	P-value
As observed									
PASI≤4	-	-	0.58*	-	-	0.36*	-	-	-
PASI≤2	-	-	1.00*	-	-	1.00*	-	-	-
PASI=0	10 (37.0)	3 (33.3)	1.00*	-	-	1.00*	-	-	-
PASI75	-	-	0.63*	-	-	1.00*	-	-	-
PASI90	-	-	0.66*	-	-	1.00*	-	-	-
PASI100	10 (47.6)	3 (50.0)	1.00*	-	-	1.00*	-	-	-
DLQI01	6 (23.1)	4 (50.0)	0.19*	-	-	0.26*	-	-	-
Last observation carried forward									
PASI≤4	57 (89.1)	11 (68.8)	0.042	-	-	0.22*	-	-	1.00*
PASI≤2	49 (76.6)	11 (71.4)	0.52	-	-	0.66*	-	-	1.00*
PASI=0	26 (40.6)	4 (25.0)	0.39*	-	-	0.70*	-	-	0.49*
PASI75	33 (60.0)	7 (63.6)	1.00*	-	-	1.00*	-	-	1.00*
PASI90	28 (50.9)	5 (45.5)	1.00*	-	-	0.67*	-	-	1.00*
PASI100	26 (47.3)	4 (36.4)	1.00*	-	-	0.68*	-	-	1.00*
DLQI01	20 (46.5)	6 (54.6)	0.63	-	-	1.00*	-	-	0.43*
Non responder imputation									
PASI≤4	24 (34.8)	7 (38.9)	0.75	-	-	1.00*	-	-	0.26*
PASI≤2	20 (29.0)	7 (38.9)	0.42	-	-	1.00*	-	-	0.26*
PASI=0	10 (14.5)	3 (16.7)	0.73*	-	-	1.00*	-	-	1.00*
PASI75	13 (18.8)	5 (27.8)	0.40	-	-	1.00*	-	-	1.00*
PASI90	11 (15.9)	4 (22.2)	0.50*	-	-	1.00*	-	-	1.00*
PASI100	10 (14.5)	3 (16.7)	0.73*	-	-	1.00*	-	-	1.00*
DLQI01	6 (8.7)	4 (22.2)	0.21*	-	-	0.52*	-	-	1.00*
Modified as observed									
PASI≤4	-	-	1.00*	-	-	1.00*	-	-	0.29*
PASI≤2	-	-	0.45*	-	-	1.00*	-	-	0.29*
PASI=0	10 (29.4)	3 (33.3)	1.00*	-	-	1.00*	-	-	1.00*
PASI75	-	-	0.18*	-	-	1.00*	-	-	0.25*
PASI90	-	-	0.37*	-	-	1.00*	-	-	0.25*
PASI100	10 (35.7)	3 (50.0)	0.65*	-	-	1.00*	-	-	1.00*
DLQI01	6 (18.2)	4 (44.4)	0.18*	-	-	1.00*	-	-	1.00*
Modified last observation carried forward									
PASI≤4	52 (80.0)	11 (68.8)	0.33	-	-	0.62*	-	-	1.00*
PASI≤2	45 (69.2)	11 (68.8)	0.97	-	-	1.00*	-	-	0.53*
PASI=0	25 (38.5)	4 (25.0)	0.39*	-	-	0.70*	-	-	1.00*
PASI75	32 (57.1)	7 (63.6)	0.75*	-	-	1.00*	-	-	1.00*
PASI90	27 (48.2)	5 (45.5)	1.00*	-	-	0.67*	-	-	1.00*
PASI100	25 (44.6)	4 (36.4)	0.74*	-	-	0.69*	-	-	1.00*
DLQI01	19 (40.4)	6 (54.6)	0.50*	-	-	1.00*	-	-	0.43*

Abbreviations: PASI, psoriasis area severity index; DLQI, dermatology life quality index; n, number of patients
*Fishers exact test
Values are not shown if one group had <3 observations. P-values <0.05 are marked in bold.
PASI≤4, patients having an absolute PASI≤4; PASI≤2, patients having an absolute PASI≤2; PASI=0, patients having an absolute PASI=0; PASI75, patients having a relative reduction in PASI of ≥75%; PASI90, patients having a relative reduction in PASI of ≥90%; PASI100, patients having a relative reduction in PASI of 100%; DLQI01, patients achieving DLQI=0/1.
Modified imputation: patients who stopped treatment before 12 months due to lack of efficacy were considered non-responders

Table SIIIa. Differentiating on failure of previous IL-17A inhibitor after 3 months.									
	All treatments			Ixekizumab			Secukinumab		
	Primary failure N = 17	Secondary failure N = 70	P-value	Secondary failure N = 66	Primary failure N = 12	P-value	Secondary failure N = 4	Primary failure N = 5	P-value
As observed									
PASI≤4	6 (100)	30 (81.1)	0.57*	-	-	0.57*	-	-	-
PASI≤2	-	-	0.65*	-	-	0.65*	-	-	-
PASI=0	-	-	0.22*	-	-	0.38*	-	-	-
PASI75	-	-	1.00*	-	-	1.00*	-	-	-
PASI90	-	-	0.66*	-	-	0.66*	-	-	-
PASI100	-	-	0.38*	-	-	0.39*	-	-	-
DLQI01	-	-	1.00*	-	-	1.00*	-	-	-
Last observation carried forward									
PASI≤4	9 (75.0)	47 (77.4)	1.00*	-	-	1.00*	-	-	1.00*
PASI≤2	7 (58.3)	36 (58.1)	0.99	-	-	1.00*	-	-	0.40*
PASI=0	5 (41.7)	21 (33.9)	0.60	-	-	0.71*	-	-	1.00*
PASI75	5 (41.7)	27 (45.8)	0.79	-	-	1.00*	-	-	1.00*
PASI90	5 (41.7)	23 (39.0)	1.00*	-	-	1.00*	-	-	1.00*
PASI100	5 (41.7)	21 (35.6)	0.69	-	-	0.72*	-	-	1.00*
DLQI01	-	-	0.65*	-	-	0.65*	-	-	-
Non responder imputation									
PASI≤4	6 (35.3)	30 (41.7)	0.63	-	-	0.57	-	-	0.17*
PASI≤2	5 (29.4)	24 (33.3)	0.76	-	-	0.67	-	-	-
PASI=0	4 (23.5)	14 (19.4)	0.74*	-	-	0.45*	-	-	-
PASI75	4 (23.5)	20 (27.8)	1.00*	-	-	0.75*	-	-	-
PASI90	4 (23.5)	16 (22.2)	1.00*	-	-	0.48*	-	-	-
PASI100	4 (23.5)	14 (19.4)	0.74*	-	-	0.45*	-	-	-
DLQI01	-	-	1.00*	-	-	1.00*	-	-	-
Modified as observed									
PASI≤4	6 (66.7)	30 (76.9)	0.67*	-	-	0.56*	-	-	-
PASI≤2	5 (55.6)	24 (61.5)	1.00*	-	-	1.00*	-	-	-
PASI=0	4 (44.4)	14 (35.9)	0.71*	-	-	0.42*	-	-	-
PASI75	4 (44.4)	20 (55.6)	0.71*	-	-	1.00*	-	-	-
PASI90	4 (44.4)	16 (44.4)	0.71*	-	-	0.70*	-	-	-
PASI100	4 (44.4)	14 (38.9)	1.00*	-	-	0.68*	-	-	-
DLQI01	-	-	0.66*	-	-	1.00*	-	-	-
Modified last observation carried forward									
PASI≤4	8 (57.1)	48 (75.0)	0.18	-	-	0.72*	-	-	0.47*
PASI≤2	6 (42.9)	36 (56.3)	0.36	-	-	0.74*	-	-	1.00*
PASI=0	5 (35.7)	21 (32.8)	0.83	-	-	0.73*	-	-	1.00*
PASI75	5 (35.7)	27 (44.3)	0.56	-	-	1.00*	-	-	1.00*
PASI90	5 (35.7)	23 (37.7)	0.89	-	-	1.00*	-	-	1.00*
PASI100	5 (35.7)	21 (34.4)	0.93	-	-	1.00*	-	-	1.00*
DLQI01	-	-	0.41*	-	-	0.65*	-	-	-
Abbreviations: PASI, psoriasis area severity index; DLQI, dermatology life quality index; n, number of patients									
*Fishers exact test									
Values are not shown if one group had <3 observations. P-values <0.05 are marked in bold.									
PASI≤4, patients having an absolute PASI≤4; PASI≤2, patients having an absolute PASI≤2; PASI=0, patients having an absolute PASI=0; PASI75, patients having a relative reduction in PASI of ≥75%; PASI90, patients having a relative reduction in PASI of ≥90%; PASI100, patients having a relative reduction in PASI of 100%; DLQI01, patients achieving DLQI=0/1.									
Modified imputation: patients who stopped treatment before 3 months due to lack of efficacy were considered non-responders									

Table SIIIb. Differentiating on failure of previous IL-17A inhibitor after 6 months.

	All treatments			Ixekizumab			Secukinumab		
	Primary failure N = 11	Secondary failure N = 63	P-value	Primary failure N = NS	Secondary failure N = NS	P-value	Primary failure N = NS	Secondary failure N = NS	P-value
As observed									
PASI≤4	-	-	0.46*	-	-	0.46*	-	-	-
PASI≤2	-	-	0.58*	-	-	0.58*	-	-	-
PASI=0	-	-	1.00*	-	-	1.00*	-	-	-
PASI75	-	-	0.58*	-	-	0.58*	-	-	-
PASI90	-	-	1.00*	-	-	1.00*	-	-	-
PASI100	-	-	1.00*	-	-	1.00*	-	-	-
DLQI01	-	-	0.34*	-	-	0.34*	-	-	-
Last observation carried forward									
PASI≤4	-	-	0.62*	-	-	1.00*	-	-	1.00*
PASI≤2	7 (63.6)	44 (72.1)	0.72*	-	-	0.70*	-	-	1.00*
PASI=0	4 (36.4)	27 (44.3)	0.75*	-	-	0.72*	-	-	1.00*
PASI75	4 (44.4)	35 (62.5)	0.47*	-	-	0.41*	-	-	1.00*
PASI90	4 (44.4)	29 (51.8)	0.73*	-	-	0.70*	-	-	1.00*
PASI100	4 (44.4)	27 (48.2)	1.00*	-	-	1.00*	-	-	1.00*
DLQI01	-	-	1.00*	-	-	1.00*	-	-	-
Non responder imputation									
PASI≤4	5 (45.5)	25 (36.8)	0.58	-	-	0.47*	-	-	-
PASI≤2	4 (36.4)	22 (32.4)	1.00*	-	-	0.71*	-	-	-
PASI=0	-	-	1.00*	-	-	0.68*	-	-	-
PASI75	-	-	0.72*	-	-	1.00*	-	-	-
PASI90	-	-	1.00*	-	-	1.00*	-	-	-
PASI100	-	-	1.00*	-	-	0.68*	-	-	-
DLQI01	-	-	1.00*	-	-	1.00*	-	-	-
Modified as observed									
PASI≤4	-	-	1.00*	-	-	1.00*	-	-	-
PASI≤2	-	-	0.64*	-	-	0.64*	-	-	-
PASI=0	-	-	1.00*	-	-	1.00*	-	-	-
PASI75	-	-	0.62*	-	-	1.00*	-	-	-
PASI90	-	-	1.00*	-	-	1.00*	-	-	-
PASI100	-	-	1.00*	-	-	1.00*	-	-	-
DLQI01	-	-	0.66*	-	-	0.37*	-	-	-
Modified last observation carried forward									
PASI≤4	-	-	0.67*	-	-	1.00*	-	-	1.00*
PASI≤2	7 (63.6)	44 (72.1)	0.72*	-	-	0.70*	-	-	1.00*
PASI=0	4 (36.4)	27 (44.3)	0.75*	-	-	0.72*	-	-	1.00*
PASI75	4 (44.4)	35 (62.5)	0.47*	-	-	0.41*	-	-	1.00*
PASI90	4 (44.4)	29 (51.8)	0.73*	-	-	0.70*	-	-	1.00*
PASI100	4 (44.4)	27 (48.2)	1.00*	-	-	1.00*	-	-	1.00*
DLQI01	-	-	1.00*	-	-	1.00*	-	-	-

Abbreviations: PASI, psoriasis area severity index; DLQI, dermatology life quality index; n, number of patients; NS, not shown

*Fishers exact test

Values are not shown if one group had <3 observations

P-values <0.05 are marked in bold

Modified imputation: patients who stopped treatment before 6 months due to lack of efficacy were considered non-responders

Table SIV. Logistic regression assessing the association between previous exposure to interleukin (IL)-inhibitors and response to another IL-17 inhibitor measured as a psoriasis area and severity index (PASI)≤2.

	Crude		Partially adjusted*		Fully adjusted**	
	OR (95% CI)	p-value	OR (95% CI)	p-value	OR (95% CI)	p-value
Previous exposure to an IL-17 inhibitor vs previous exposure to (an)other biologic(s)						
3 months	0.84 (0.62-1.15)	0.28	0.76 (0.51-1.13)	0.17	0.79 (0.50-1.25)	0.33
6 months	1.01 (0.76-1.35)	0.93	0.92 (0.64-1.33)	0.65	0.93 (0.61-1.43)	0.74
12 months	1.06 (0.78-1.44)	0.69	1.08 (0.73-1.58)	0.71	1.19 (0.77-1.85)	0.42
Previous exposure to an IL-17 inhibitor: treatment failure vs other reasons for drug discontinuation						
3 months	0.91 (0.47-1.76)	0.77	0.74 (0.36-1.49)	0.39	0.76 (0.35-1.69)	0.51
6 months	1.51 (0.61-2.16)	0.66	0.92 (0.47-1.80)	0.81	0.93 (0.47-2.05)	0.96
12 months	1.17 (0.60-2.29)	0.65	0.92 (0.45-1.87)	0.82	1.13 (0.52-2.45)	0.76
Previous exposure to an IL-17 inhibitor: primary vs secondary failure						
3 months	0.61 (0.24-1.58)	0.31	Na		Na	
6 months	0.58 (0.26-1.31)	0.19	Na		Na	
12 months	0.76 (0.34-1.73)	0.52	Na		Na	
Na, not available due to limited number of observations.						
*Adjusted for drug						
**adjusted for drug, sex, age, weight, and number of previous therapies						