

Table 1 Retention and remission rates of first TNFi in psoriatic arthritis and axial spondyloarthritis patients

Psoriatic arthritis patients (n=5855)										
Women (n=2988)						Men (n=2867)				
Retention rates (% 95%CI) of first TNFi compared across baseline ΔPEG quartiles										
TNFi retention rates	1 st ΔPEG quartile	2 nd ΔPEG quartile	3 rd ΔPEG quartile	4 th ΔPEG quartile	p value	1 st ΔPEG quartile	2 nd ΔPEG quartile	3 rd ΔPEG quartile	4 th ΔPEG quartile	p value
	(-100 to 0) (n=815)	(1 to 17) (n=694)	(18 to 38) (n=739)	(39 to 100) (n=740)		(-100 to -1) (n=648)	(0 to 9) (n=683)	(10 to 30) (n=865)	(31 to 100) (n=671)	
6 months	87% (85-90%) n=815	85% (82-88%) n=694	81% (78-84%) n=739	74% (71-77%) n=740	<0.001	93% (91-95%) n=648	93% (91-95%) n=683	92% (90-93%) n=865	86% (83-89%) n=671	<0.001
12 months	79% (76-82%) n=815	76% (73-79%) n=694	70% (67-74%) n=739	61% (57-65%) n=740	<0.001	88% (85-90%) n=648	86% (84-89%) n=683	83% (80-85%) n=865	78% (75-81%) n=671	<0.001
24 months	69% (66-72%) n=815	69% (65-72%) n=694	61% (57-65%) n=739	52% (48-56%) n=740	<0.001	77% (74-81%) n=648	79% (76-82%) n=683	74% (71-78%) n=865	69% (66-73%) n=671	<0.001
Proportions, % (95%CI), of patients achieving DAPSA28 remission compared across baseline ΔPEG quartiles										
DAPSA28 remission (≤4)	1 st ΔPEG quartile	2 nd ΔPEG quartile	3 rd ΔPEG quartile	4 th ΔPEG quartile	p value	1 st ΔPEG quartile	2 nd ΔPEG quartile	3 rd ΔPEG quartile	4 th ΔPEG quartile	p value
	(-100 to 0)	(1 to 17)	(18 to 38)	(39 to 100)		(-100 to -1)	(0 to 9)	(10 to 30)	(31 to 100)	
6 months	21% (17-25%) n=420	24% (19-28%) n=413	12% (9-15%) n=432	12% (9-15%) n=457	<0.001	42% (37-47%) n=339	38% (33-42%) n=399	30% (26-34%) n=465	27% (23-32%) n=412	<0.001
12 months	23% (18-27%) n=391	27% (22-32%) n=352	16% (13-20%) n=393	14% (11-17%) n=400	<0.001	41% (36-46%) n=333	40% (35-45%) n=359	34% (29-38%) n=455	29% (25-34%) n=383	0.002
24 months	27% (23-32%) n=325	27% (22-32%) n=290	19% (15-23%) n=328	13% (9-17%) n=329	<0.001	46% (40-51%) n=295	42% (36-48%) n=300	33% (28-37%) n=382	28% (23-33%) n=309	<0.001
Proportions, % (95%CI), of patients achieving DAS28(4)CRP remission compared across baseline ΔPEG quartiles										
DAS28(4)CRP remission (<2.6)	1 st ΔPEG quartile	2 nd ΔPEG quartile	3 rd ΔPEG quartile	4 th ΔPEG quartile	p value	1 st ΔPEG quartile	2 nd ΔPEG quartile	3 rd ΔPEG quartile	4 th ΔPEG quartile	p value
	(-100 to 0)	(1 to 17)	(18 to 38)	(39 to 100)		(-100 to -1)	(0 to 9)	(10 to 30)	(31 to 100)	
6 months	51% (47-56%) n=492	48% (44-53%) n=464	39% (34-43%) n=460	36% (32-41%) n=465	<0.001	63% (58-68%) n=378	67% (63-71%) n=458	59% (55-63%) n=506	59% (54-63%) n=419	0.04
12 months	53% (48-57%)	53% (48-58%)	43% (38-47%)	38% (33-43%)	<0.001	68% (58-68%)	69% (63-71%)	63% (55-63%)	65% (54-63%)	0.21

	n=449	n=397	n=419	n=409		n=370	n=404	n=492	n=389	
24 months	58% (53-63%)	58% (52-63%)	47% (42-53%)	37% (32-43%)	<0.001	69% (64-74%)	72% (67-77%)	64% (59-69%)	60% (55-66%)	0.007
	n=358	n=323	n=349	n=337		n=324	n=330	n=408	n=316	

Proportions, % (95%CI), of patients achieving DAS28(3)CRP remission compared across baseline ΔPEG quartiles

DAS28(3)CRP remission (<2.6)	1st ΔPEG quartile (-100 to 0)	2nd ΔPEG quartile (1 to 17)	3rd ΔPEG quartile (18 to 38)	4th ΔPEG quartile (39 to 100)	p value	1st ΔPEG quartile (-100 to -1)	2nd ΔPEG quartile (0 to 9)	3rd ΔPEG quartile (10 to 30)	4th ΔPEG quartile (31 to 100)	p value
6 months	52% (48-57%) n=507	53% (48-57%) n=469	47% (43-52%) n=469	48% (43-52%) n=472	0.19	65% (60-70%) n=386	69% (64-73%) n=467	64% (60-68%) n=517	68% (64-73%) n=426	0.28
12 months	54% (50-59%) n=471	57% (52-61%) n=409	53% (48-57%) n=435	50% (45-55%) n=420	0.30	70% (66-75%) n=381	72% (67-76%) n=411	69% (65-73%) n=503	72% (68-76%) n=396	0.77
24 months	61% (56-66%) n=374	60% (55-65%) n=336	55% (50-60%) n=367	52% (46-57%) n=347	0.04	74% (69-79%) n=331	76% (71-80%) n=341	70% (66-74%) n=425	73% (69-78%) n=323	0.32

Axial spondyloarthritis patients (n=9013)

Women (n=3639)

Men (n=5374)

Retention rates of first TNFi (%; 95%CI) compared across baseline ΔPEG quartiles

TNFi retention rates	1st ΔPEG quartile (-100 to 2) (n=908)	2nd ΔPEG quartile (3 to 20) (n=915)	3rd ΔPEG quartile (21 to 42) (n=907)	4th ΔPEG quartile (43 to 100) (n=909)	p value	1st ΔPEG quartile (-100 to -1) (n=1220)	2nd ΔPEG quartile (0 to 15) (n=1487)	3rd ΔPEG quartile (16 to 37) (n=1338)	4th ΔPEG quartile (38 to 100) (n=1329)	p value
6 months	88% (86-90%) n=908	84% (82-87%) n=915	78% (75-81%) n=907	76% (73-79%) n=909	<0.001	94% (92-95%) n=1220	91% (89-92%) n=1487	89% (88-91%) n=1338	87% (85-89%) n=1329	<0.001
12 months	81% (78-84%) n=908	74% (71-77%) n=915	67% (64-70%) n=907	64% (61-68%) n=909	<0.001	88% (86-90%) n=1220	86% (84-88%) n=1487	83% (81-85%) n=1338	79% (77-82%) n=1329	<0.001
24 months	75% (72-78%) n=908	64% (61-67%) n=915	60% (57-64%) n=907	55% (52-59%) n=909	<0.001	83% (81-86%) n=1220	80% (77-82%) n=1487	75% (72-77%) n=1338	72% (69-75%) n=1329	<0.001

Proportions, % (95%CI), of patients achieving ASDAS<1.3 compared across baseline ΔPEG quartiles

ASDAS<1.3	1st ΔPEG quartile (-100 to 2)	2nd ΔPEG quartile (3 to 20)	3rd ΔPEG quartile (21 to 42)	4th ΔPEG quartile (43 to 100)	p value	1st ΔPEG quartile (-100 to -1)	2nd ΔPEG quartile (0 to 15)	3rd ΔPEG quartile (16 to 37)	4th ΔPEG quartile (38 to 100)	p value
6 months	28% (23-33%)	24% (19-28%)	23% (18-27%)	17% (14-21%)	0.005	40% (36-45%)	41% (36-45%)	34% (30-38%)	31% (27-35%)	0.001

	n=313	n=293	n=289	n=449		n=507	n=527	n=446	n=625	
12 months	27% (22-33%)	23% (18-29%)	23% (18-29%)	15% (12-19%)	0.002	41% (37-46%)	41% (37-46%)	33% (28-37%)	31% (27-35%)	0.001
	n=266	n=221	n=233	n=370		n=427	n=458	n=403	n=508	
24 months	29% (23-35%)	24% (18-30%)	27% (21-33%)	16% (11-20%)	0.002	45% (40-50%)	41% (36-45%)	39% (33-44%)	31% (27-35%)	0.001
	n=225	n=197	n=205	n=284		n=369	n=406	n=335	n=444	
Proportions, % (95%CI), of patients achieving BASDAI<2 compared across baseline ΔPEG quartiles										
BASDAI<2	1st ΔPEG quartile (-100 to 2)	2nd ΔPEG quartile (3 to 20)	3rd ΔPEG quartile (21 to 42)	4th ΔPEG quartile (43 to 100)	P value	1st ΔPEG quartile (-100 to -1)	2nd ΔPEG quartile (0 to 15)	3rd ΔPEG quartile (16 to 37)	4th ΔPEG quartile (38 to 100)	p value
6 months	44% (39-89%) n=517	31% (28-35%) n=525	27% (23-31%) n=535	26% (22-29%) n=625	<0.001	57% (54-61%) n=796	50% (47-53%) n=955	44% (41-47%) n=866	40% (37-43%) n=921	<0.001
12 months	45% (41-50%) n=487	32% (27-36%) n=479	29% (24-33%) n=471	24% (21-28%) n=522	<0.001	59% (55-62%) n=734	51% (48-55%) n=892	44% (40-47%) n=812	41% (38-44%) n=833	<0.001
24 months	48% (43-53%) n=385	33% (28-38%) n=395	30% (25-34%) n=386	21% (17-25%) n=406	<0.001	60% (56-63%) n=621	54% (50-57%) n=759	44% (40-47%) n=665	40% (37-44%) n=686	<0.001
Proportions, % (95%CI), of patients achieving BASDAI<2 and CRP<7mg/l compared across baseline ΔPEG quartiles										
BASDAI<2 and CRP<7mg/l	1st ΔPEG quartile (-100 to 2)	2nd ΔPEG quartile (3 to 20)	3rd ΔPEG quartile (21 to 42)	4th ΔPEG quartile (43 to 100)	P value	1st ΔPEG quartile (-100 to -1)	2nd ΔPEG quartile (0 to 15)	3rd ΔPEG quartile (16 to 37)	4th ΔPEG quartile (38 to 100)	p value
6 months	33% (29-37%) n=527	23% (20-27%) n=541	21% (18-24%) n=557	20% (17-23%) n=641	<0.001	43% (40-47%) n=822	40% (37-44%) n=973	33% (30-36%) n=885	32% (29-35%) n=927	<0.001
12 months	31% (26-35%) n=496	21% (18-25%) n=500	21% (17-24%) n=488	17% (14-20%) n=529	<0.001	45% (42-49%) n=752	39% (36-43%) n=905	35% (32-38%) n=824	31% (28-34%) n=828	<0.001
24 months	32% (28-37%) n=404	23% (19-27%) n=408	24% (19-28%) n=394	16% (13-20%) n=415	<0.001	46% (42-50%) n=626	41% (38-44%) n=772	33% (29-36%) n=672	31% (28-35%) n=681	<0.001

p-values retention rates: Kaplan-Meier analyses with log-rank test; p-values remission rates: Chi-Square test; n, numbers available; ASDAS, Ankylosing Spondylitis Disease Activity Score; BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; DAS28(3)CRP, 28-joint disease activity score with CRP and 3 variables (excluding patient's global); DAS28(4)CRP, 28-joint disease activity score with CRP and 4 variables (including patient's global); ΔPEG, patient's minus evaluator's global assessment; TNFi, tumor necrosis factor inhibitor. .