

TableS1. Comparison of characteristics of the participants between satisfied group and dissatisfied group with each experience in switching process.

Characteristics	The written information				The verbal information				The training for the new device				
	Satisfied		Dissatisfied		Satisfied		Dissatisfied		Satisfied		Dissatisfied		
	group (N=394)	group (N=249)	<i>p value</i>		group (N=362)	group (N=277)	<i>p value</i>		group (N=364)	group (N=295)	<i>p value</i>		
Gender, n (%)					0.5201				0.3189				0.00458*
Female	258 (66)	170 (69)			235 (65)	192 (70)			235 (65)	214 (74)			
Male	130 (33)	75 (30)			121 (34)	82 (30)			125 (34)	74 (26)			
Prefer not to say	4 (1)	1 (0)			4 (1)	1 (0)			3 (1)	2 (1)			
Age, n (%)					0.0546				0.0003*				0.1091
18-24	28 (7)	24 (10)			25 (7)	27 (10)			26 (7)	26 (9)			
25-34	56 (14)	52 (21)			51 (14)	61 (22)			57 (16)	65 (22)			
35-44	70 (18)	50 (20)			55 (15)	59 (21)			71 (20)	62 (21)			
45-54	94 (24)	58 (23)			85 (23)	66 (24)			74 (20)	61 (21)			
55-64	80 (20)	40 (16)			78 (22)	38 (14)			77 (21)	45 (15)			
65+	61 (15)	24 (10)			63 (17)	25 (9)			54 (15)	35 (12)			
Prefer not to say	5 (1)	1 (0)			5 (1)	1 (0)			5 (1)	1 (0)			
Living areas, n (%)					0.3173				0.0267*				0.9099
South East	101 (26)	69 (28)			96 (27)	72 (26)			95 (26)	80 (27)			
South West	75 (19)	43 (17)			76 (21)	48 (17)			68 (19)	60 (20)			
North East and Yorkshire	52 (13)	27 (11)			53 (15)	28 (10)			49 (13)	34 (12)			
Midlands	42 (11)	41 (16)			31 (9)	51 (18)			46 (13)	33 (11)			
East of England	46 (12)	17 (7)			37 (10)	28 (10)			39 (11)	28 (9)			
North West	31 (8)	17 (7)			26 (7)	18 (7)			28 (8)	19 (6)			
London	22 (6)	20 (8)			19 (5)	22 (8)			21 (6)	24 (8)			
Scotland	16 (4)	6 (2)			14 (4)	4 (1)			8 (2)	11 (4)			
Wales	6 (2)	6 (2)			7 (2)	4 (1)			6 (2)	4 (1)			

Northern Ireland	1	(0)	1	(0)	1	(0)	1	(0)	2	(1)	1	(0)	
Channel Islands	1	(0)	1	(0)	1	(0)	0	(0)	1	(0)	0	(0)	
Isle of Wight	1	(0)	1	(0)	1	(0)	1	(0)	1	(0)	1	(0)	
Medical conditions, n (%)					0.2988				0.0587			0.1358	
CD	144	(37)	74	(30)		122	(34)	93	(34)	125	(35)	104	(35)
RA/JIA	104	(27)	64	(26)		106	(29)	54	(19)	94	(26)	69	(23)
AS	79	(20)	53	(21)		70	(19)	60	(22)	82	(23)	49	(17)
PsA	22	(6)	24	(10)		23	(6)	30	(11)	22	(6)	30	(10)
UC	25	(6)	19	(8)		23	(6)	26	(9)	21	(6)	24	(8)
Psoriasis	15	(4)	11	(4)		13	(4)	11	(4)	14	(4)	12	(4)
Others	3	(1)	4	(2)		4	(1)	3	(1)	4	(1)	7	(2)
Period of Humira use before switching, n (%)					0.1228				0.0095*			0.3304	
3 months or less	14	(4)	14	(6)		12	(3)	11	(4)	14	(4)	16	(5)
More than 3 months to 1 year	66	(17)	51	(20)		60	(17)	53	(19)	61	(17)	58	(20)
More than 1 year to 5 years	208	(53)	130	(52)		177	(49)	159	(57)	188	(52)	152	(52)
More than 5 years to 10 years	68	(17)	42	(17)		72	(20)	41	(15)	68	(19)	53	(18)
More than 10 years	38	(10)	12	(5)		41	(11)	13	(5)	33	(9)	16	(5)
Self-reported disease activity, n (%)					0.0282*				0.041*			0.0358*	
Very well controlled	243	(62)	157	(63)		229	(63)	174	(63)	226	(62)	190	(65)
controlled well	104	(26)	64	(26)		99	(27)	69	(25)	84	(23)	80	(27)
Neither	40	(10)	21	(8)		26	(7)	25	(9)	42	(12)	18	(6)
Not controlled	1	(0)	6	(2)		2	(1)	7	(3)	4	(1)	5	(2)
Not controlled well at all	6	(2)	0	(0)		6	(2)	0	(0)	7	(2)	1	(0)

No. of injections of the new biosimilar before survey, n (%)	0.3279				0.4633				0.1015			
1	35	(9)	27	(11)	32	(9)	29	(11)	37	(10)	31	(11)
2	54	(14)	26	(11)	43	(12)	31	(11)	51	(14)	25	(9)
3	55	(14)	25	(10)	49	(14)	28	(10)	48	(13)	31	(11)
4	37	(9)	31	(13)	40	(11)	29	(11)	40	(11)	35	(12)
5	25	(6)	26	(11)	22	(6)	21	(8)	16	(4)	30	(10)
6	60	(15)	30	(12)	52	(14)	46	(17)	50	(14)	46	(16)
7	18	(5)	12	(5)	15	(4)	13	(5)	13	(4)	11	(4)
8	33	(8)	22	(9)	22	(6)	27	(10)	26	(7)	27	(9)
9	10	(3)	8	(3)	12	(3)	9	(3)	9	(2)	8	(3)
10	13	(3)	12	(5)	18	(5)	12	(4)	19	(5)	11	(4)
More than 10	52	(13)	27	(11)	55	(15)	27	(10)	53	(15)	36	(12)

CD, Crohn's Disease, RA, Rheumatoid arthritis, JIA, Juvenile Idiopathic Arthritis, AS, Axial spondyloarthritis including ankylosing spondylitis, PsA, Psoriatic arthritis, UC, Ulcerative colitis, Valuables presented as n (%), P values were assigned based on the chi-square test for categorical value when it's expected value is higher than 10 and Fisher's exact test was conducted if the expected values of categorical values were smaller than 10. *P values less than 0.05 was considered statistically significant.

Table S2a

Comparison of proportion of patients with "worse perception" or "better perception" on the new biosimilars between those expressing satisfaction and dissatisfaction in the switching process

		The written information								*unadjusted OR (95%CI)	*p value
		satisfied		dissatisfied		Neither		N/A			
		group	group	group	group	group	group	group	group		
		(N=394)	(N=249)	(N=238)	(N=13)	(N=238)	(N=13)	(N=238)	(N=13)		
Side effects	worse perception, n (%)	118	(30)	158	(63)	117	(49)	7	(54)	0.15 (0.06-0.40)	<.0001†
	better perception, n (%)	25	(6)	5	(2)	6	(3)	1	(8)		
	the same, n (%)	218	(56)	58	(23)	101	(42)	1	(8)		
	N/A, n (%)	31	(8)	28	(11)	14	(6)	4	(31)		
injecting Pain when	worse perception, n (%)	275	(70)	194	(78)	183	(77)	9	(69)	0.90 (0.45-1.81)	0.861
	better perception, n (%)	22	(6)	14	(6)	6	(3)	0	(0)		
	the same, n (%)	87	(22)	31	(13)	46	(19)	1	(8)		
	N/A, n (%)	8	(2)	9	(4)	3	(1)	3	(23)		
injection device using the	worse perception, n (%)	159	(40)	153	(62)	118	(50)	5	(38)	0.35 (0.21-0.58)	<.0001†
	better perception, n (%)	77	(20)	26	(10)	35	(15)	2	(15)		
	the same, n (%)	146	(37)	64	(26)	81	(34)	3	(23)		
	N/A, n (%)	11	(3)	5	(2)	3	(1)	3	(23)		
symptoms Managing	worse perception, n (%)	112	(28)	172	(69.1)	123	(52)	5	(38)	0.11 (0.02-0.49)	0.0011†
	better perception, n (%)	12	(3)	2	(0.8)	4	(2)	0	(0)		
	the same, n (%)	254	(64)	57	(22.9)	103	(44)	5	(38)		
	N/A, n (%)	16	(4)	18	(7.23)	6	(3)	3	(23)		

Valuables presented as n (%). *Comparison of frequency of responses with "worse perception" and "better perception" of the new biosimilar compared to originator between

"satisfied group" and "dissatisfied group" with the experiences in the switching process to biosimilar were expressed as unadjusted odds ratios (OR), 95% confidential intervals

(95%CI) and p values. Responses expressing "3 (neither)" or "not applicable (N/A)" in terms of satisfaction with the services in switching process and "the same" or "N/A" in terms of

the perception of the new biosimilar were excluded from the analysis. P values were assigned based on the chi-square test for categorical value when it's expected value is higher than 10 and Fisher's exact test was conducted if the expected values of categorical values were smaller than 10. †P values less than 0.05 was considered statistically significant.

Table S2b Comparison of proportion of patients with "worse perception" or "better perception" on the new biosimilars between those expressing satisfaction and dissatisfaction in the switching process

		The verbal information								*unadjusted OR (95%CI)	*p value
		Satisfied group		Dissatisfied group		Neither		N/A			
		(N=362)		(N=277)		(N=175)		(N=79)			
Side effects	Worse perception, n (%)	117	(33)	164	(59)	83	(47)	34	(43)	0.15 (0.06-0.40)	<.0001†
	Better perception, n (%)	24	(7)	5	(2)	5	(3)	3	(4)		
	The same, n (%)	192	(53)	79	(29)	76	(43)	31	(39)		
	N/A, n (%)	27	(8)	29	(10)	11	(6)	11	(14)		
Pain when injecting	Worse perception, n (%)	258	(71)	225	(82)	125	(72)	52	(66)	0.67 (0.30-1.50)	0.428
	Better perception, n (%)	17	(5)	10	(4)	13	(7)	3	(4)		
	The same, n (%)	76	(21)	34	(12)	34	(20)	20	(25)		
	N/A, n (%)	10	(3)	7	(3)	2	(1)	4	(5)		
The ease of using the injection device	Worse perception, n (%)	153	(42)	166	(60)	84	(48)	32	(41)	0.45 (0.28-0.72)	0.0008†
	Better perception, n (%)	66	(18)	32	(12)	26	(15)	16	(20)		
	The same, n (%)	130	(36)	73	(27)	63	(36)	27	(34)		
	N/A, n (%)	12	(3)	4	(1)	2	(1)	4	(5)		
Managing symptoms	Worse perception, n (%)	117	(32)	175	(63)	89	(51)	32	(41)	0.20 (0.05-0.74)	0.0177†
	Better perception, n (%)	10	(3)	3	(1)	(3)	(2)	2	(3)		
	The same, n (%)	221	(61)	76	(27)	(75)	(43)	45	(57)		
	N/A, n (%)	13	(4)	23	(8)	(7)	(4)	0	(0)		

Valuables presented as n (%). *Comparison of frequency of responses with "worse perception" and "better perception" of the new biosimilar compared to originator between "satisfied group" and "dissatisfied group" with the experiences in the switching process to biosimilar were expressed as unadjusted odds ratios (OR), 95% confidential intervals (95%CI) and p values. Responses expressing "3 (neither)" or "not applicable (N/A)" in terms of satisfaction with the services in switching process and "the same" or "N/A" in terms of the perception of the new biosimilar were excluded from the analysis. P values were assigned based on the chi-square test for categorical value when it's expected value is higher than 10 and Fisher's exact test was conducted if the expected values of categorical values were smaller than 10. †P values less than 0.05 was considered statistically significant.

Table S2c

Comparison of proportion of patients with "worse perception" or "better perception" on the new biosimilars between those expressing satisfaction and dissatisfaction in the switching process

		The training									
		satisfied		dissatisfied		Neither		N/A		*unadjusted OR (95%CI)	*p value
		group		group		(N=149)		(N=86)			
		(N=364)		(N=295)							
Side effects	worse perception, n (%)	133	(37)	176	(60)	65	(44)	25	(29)	0.15 (0.06-0.41)	<.0001†
	better perception, n (%)	25	(7)	5	(2)	4	(3)	3	(4)		
	the same, n (%)	176	(48)	90	(31)	65	(44)	47	(55)		
	N/A, n (%)	29	(8)	24	(8)	15	(10)	10	(12)		
injecting	worse perception, n (%)	254	(70)	242	(83)	113	(76)	52	(60)	0.19 (0.07-0.49)	0.0001†
	better perception, n (%)	28	(8)	5	(2)	8	(5)	2	(2)		
	the same, n (%)	75	(21)	38	(13)	27	(18)	24	(28)		
	N/A, n (%)	6	(2)	8	(3)	1	(1)	8	(9)		
injection device	worse perception, n (%)	134	(37)	194	(66)	76	(51)	32	(37)	0.24 (0.15-0.40)	<.0001†
	better perception, n (%)	79	(22)	28	(10)	20	(14)	13	(15)		
	the same, n (%)	144	(40)	66	(22)	51	(34)	32	(37)		
	N/A, n (%)	6	(2)	6	(2)	1	(1)	9	(10)		
symptoms	worse perception, n (%)	136	(37)	178	(60)	67	(45)	33	(38)	0.38 (0.11-1.30)	0.1412
	better perception, n (%)	8	(2)	4	(1)	4	(3)	2	(2)		
	the same, n (%)	201	(55)	97	(33)	73	(49)	46	(53)		
	N/A, n (%)	18	(5)	16	(5)	4	(3)	5	(6)		

Valuables presented as n (%). *Comparison of frequency of responses with "worse perception" and "better perception" of the new biosimilar compared to originator between "satisfied group" and "dissatisfied group" with the experiences in the switching process to biosimilar were expressed as unadjusted odds ratios (OR), 95% confidential intervals (95%CI) and p values. Responses expressing "3 (neither)" or "not applicable (N/A)" in terms of satisfaction with the services in switching process and "the same" or "N/A" in terms of the perception of the new biosimilar were excluded from the analysis. P values were assigned based on the chi-square test for categorical value when it's expected value is higher than 10 and Fisher's exact test was conducted if the expected values of categorical values were smaller than 10. †P values less than 0.05 was considered statistically significant.

