Table SI. Number of treatment switches between anti-tumour necrosis factor-α agents in a total of 171 patients

Previous treatment	Subsequent treatment	Treatment cycles, n
Adalimumab	Adalimumab	14
	Etanercept	26
	Infliximab	7
Etanercept	Adalimumab	87
•	Etanercept	31
	Infliximab	6
Infliximab	Adalimumab	11
	Etanercept	10
	Infliximab	2

Table SII. Number of treatment cycles with concomitant systemic therapy and/or phototherapy

Concomitant treatment	Adalimumab	Etanercept	Infliximab	All anti-TNF-α agents
MTX	23	25	8	56
311 nm UVB	6	7	0	13
Retinoids	1	5	0	6
Cyclosporin A	0	1	0	1
First 311 nm UVB, subsequently MTX	1	2	0	3
Others	1	2	0	3
Total	32	42	8	82

TNF-a: tumour necrosis factor-a; MTX: methotrexate; UVB: ultraviolet B.

Table SIII. Analysis of drug survival at selected time-points

- 1	Anti-TNF-α agent	Time-point, month	Treatment cycles, n	Events, n	Drug survival, %	Standard error	Lower 95% CI	Upper 95% C
	Adalimumab	0	460	0	1.000	0.0000	1.000	1.000
		4	387	33	0.925	0.0126	0.896	0.946
		12	245	84	0.709	0.0229	0.661	0.751
		24	150	42	0.570	0.0267	0.516	0.620
		36	75	11	0.516	0.0289	0.458	0.571
		48	23	2	0.496	0.0310	0.434	0.555
		60	8	1	0.475	0.0364	0.402	0.544
-	Etanercept	0	501	0	1.000	0.0000	1.000	1.000
l		4	432	50	0.898	0.0136	0.868	0.922
		12	316	89	0.708	0.0209	0.664	0.746
		24	241	42	0.608	0.0230	0.561	0.651
		36	184	18	0.560	0.0238	0.512	0.605
		48	134	20	0.492	0.0253	0.441	0.540
		60	92	11	0.446	0.0265	0.394	0.497
l		72	55	11	0.382	0.0291	0.325	0.438
l		84	15	4	0.337	0.0336	0.272	0.403
l	Infliximab	0	58	0	1.000	0.0000	1.0000	1.000
		4	51	7	0.879	0.0428	0.7634	0.941
		12	32	17	0.580	0.0655	0.4419	0.696
		24	16	15	0.301	0.0622	0.1860	0.424
		36	11	4	0.226	0.0569	0.1257	0.344
ı		48	5	5	0.117	0.0461	0.0464	0.224
		60	3	0	0.117	0.0461	0.0464	0.224
		72	2	0	0.117	0.0461	0.0464	0.224
1		84	1	0	0.117	0.0461	0.0464	0.224
	Adalimumab	0	460	0	1.000	0.0000	1.000	1.000
		4	382	33	0.924	0.0127	0.895	0.946
		12	237	79	0.716	0.0230	0.668	0.758
l		24	140	38	0.581	0.0273	0.526	0.633
		36	69	10	0.528	0.0298	0.468	0.584
l		48	18	2	0.506	0.0324	0.441	0.567
ı		60	7	0	0.506	0.0324	0.441	0.567
	Etanercept	0	501	0	1.000	0.0000	1.000	1.000
l		4	428	49	0.900	0.0136	0.870	0.923
l		12	304	84	0.715	0.0210	0.672	0.754
l		24	225	37	0.622	0.0232	0.574	0.665
ı		36	166	15	0.577	0.0243	0.528	0.623
l		48	122	14	0.522	0.0261	0.469	0.571
l		60	82	10	0.474	0.0278	0.418	0.527
l		72	48	9	0.410	0.0314	0.348	0.470
		84	12	4	0.354	0.0381	0.280	0.428
	Infliximab	0	58	0	1.000	0.0000	1.0000	1.000
۱		4	50	7	0.879	0.0430	0.7622	0.940
		12	29	16	0.581	0.0673	0.4386	0.700
l		24	13	14	0.282	0.0647	0.1640	0.411
		36	9	3	0.213	0.0599	0.1095	0.338
١		48	4	4	0.113	0.0488	0.0405	0.228
1		60	2	0	0.113	0.0488	0.0405	0.228
		72	2	0	0.113	0.0488	0.0405	0.228
l		84	1	0	0.113	0.0488	0.0405	0.228
1	Adalimumab	0	460	0	1.000	0.0000	1.000	1.000
		4	382	39	0.911	0.0137	0.880	0.934
		12	237	91	0.678	0.0235	0.630	0.722
		24	140	47	0.524	0.0270	0.470	0.575
l		36	69	13	0.460	0.0291	0.403	0.516
		48	18	4	0.424	0.0322	0.360	0.486
l			7	0	0.424	0.0322	0.360	0.486
		60	,			0.0000	1000	1000
	Etanercept	60 0	501	0	1.000			
	Etanercept			0 54	0.890	0.0141	0.859	0.915
	Etanercept	0 4 12	501 428 304	0 54 98	0.890 0.681	0.0141 0.0215	0.859 0.637	0.915 0.721
	Etanercept	0 4 12 24	501 428	0 54 98 49	0.890 0.681 0.565	0.0141 0.0215 0.0233	0.859 0.637 0.518	0.915 0.721 0.609
	Etanercept	0 4 12 24 36	501 428 304 225 166	0 54 98 49 20	0.890 0.681 0.565 0.511	0.0141 0.0215 0.0233 0.0240	0.859 0.637 0.518 0.463	0.915 0.721 0.609 0.557
	Etanercept	0 4 12 24	501 428 304 225 166 122	0 54 98 49 20 16	0.890 0.681 0.565 0.511 0.457	0.0141 0.0215 0.0233 0.0240 0.0251	0.859 0.637 0.518 0.463 0.407	0.915 0.721 0.609 0.557 0.505
	Etanercept	0 4 12 24 36 48 60	501 428 304 225 166 122 82	0 54 98 49 20 16 11	0.890 0.681 0.565 0.511	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261	0.859 0.637 0.518 0.463 0.407 0.359	0.915 0.721 0.609 0.557
	Etanercept	0 4 12 24 36 48 60 72	501 428 304 225 166 122 82 48	0 54 98 49 20 16 11	0.890 0.681 0.565 0.511 0.457	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286	0.859 0.637 0.518 0.463 0.407	0.915 0.721 0.609 0.557 0.505
	Etanercept	0 4 12 24 36 48 60	501 428 304 225 166 122 82 48 12	0 54 98 49 20 16 11 9	0.890 0.681 0.565 0.511 0.457 0.411 0.355 0.269	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286 0.0370	0.859 0.637 0.518 0.463 0.407 0.359 0.300 0.200	0.915 0.721 0.609 0.557 0.505 0.461 0.411 0.343
	Etanercept Infliximab	0 4 12 24 36 48 60 72	501 428 304 225 166 122 82 48 12 58	0 54 98 49 20 16 11	0.890 0.681 0.565 0.511 0.457 0.411 0.355 0.269 1.0000	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286 0.0370 0.0000	0.859 0.637 0.518 0.463 0.407 0.359 0.300 0.200 1.0000	0.915 0.721 0.609 0.557 0.505 0.461 0.411 0.343 1.000
		0 4 12 24 36 48 60 72 84	501 428 304 225 166 122 82 48 12 58	0 54 98 49 20 16 11 9	0.890 0.681 0.565 0.511 0.457 0.411 0.355 0.269	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286 0.0370	0.859 0.637 0.518 0.463 0.407 0.359 0.300 0.200	0.915 0.721 0.609 0.557 0.505 0.461 0.411 0.343
		0 4 12 24 36 48 60 72 84 0	501 428 304 225 166 122 82 48 12 58	0 54 98 49 20 16 11 9 7	0.890 0.681 0.565 0.511 0.457 0.411 0.355 0.269 1.0000	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286 0.0370 0.0000	0.859 0.637 0.518 0.463 0.407 0.359 0.300 0.200 1.0000	0.915 0.721 0.609 0.557 0.505 0.461 0.343 1.000
		0 4 12 24 36 48 60 72 84 0 4 12	501 428 304 225 166 122 82 48 12 58 50 29	0 54 98 49 20 16 11 9 7 0 8	0.890 0.681 0.565 0.511 0.457 0.411 0.355 0.269 1.0000 0.8621 0.5147	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286 0.0370 0.0000 0.0453 0.0659	0.859 0.637 0.518 0.463 0.407 0.359 0.300 0.200 1.0000 0.7431 0.3794	0.915 0.721 0.609 0.557 0.505 0.461 0.411 0.343 1.000 0.929 0.634
		0 4 12 24 36 48 60 72 84 0 4 12 24	501 428 304 225 166 122 82 48 12 58 50 29	0 54 98 49 20 16 11 9 7 0 8 20 16	0.890 0.681 0.565 0.511 0.457 0.411 0.355 0.269 1.0000 0.8621 0.5147 0.2307	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286 0.0370 0.0000 0.0453 0.0659 0.0560	0.859 0.637 0.518 0.463 0.407 0.359 0.300 0.200 1.0000 0.7431 0.3794 0.1316	0.915 0.721 0.609 0.557 0.505 0.461 0.411 0.343 1.000 0.929 0.634 0.346
		0 4 12 24 36 48 60 72 84 0 4 12 24 36	501 428 304 225 166 122 82 48 12 58 50 29	0 54 98 49 20 16 11 9 7 0 8 20 16	0.890 0.681 0.565 0.511 0.457 0.411 0.355 0.269 1.0000 0.8621 0.5147 0.2307 0.1597	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286 0.0370 0.0000 0.0453 0.0659 0.0560 0.0487	0.859 0.637 0.518 0.463 0.407 0.359 0.300 0.200 1.0000 0.7431 0.3794 0.1316 0.0788	0.915 0.721 0.609 0.557 0.505 0.461 0.411 0.343 1.000 0.929 0.634 0.346
		0 4 12 24 36 48 60 72 84 0 4 12 24 36 48	501 428 304 225 166 122 82 48 12 58 50 29	0 54 98 49 20 16 11 9 7 0 8 20 16	0.890 0.681 0.565 0.511 0.457 0.411 0.355 0.269 1.0000 0.8621 0.5147 0.2307 0.1597 0.0852	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286 0.0370 0.0000 0.0453 0.0659 0.0560 0.0487 0.0380	0.859 0.637 0.518 0.463 0.407 0.359 0.300 0.200 1.0000 0.7431 0.3794 0.1316 0.0788 0.0299	0.915 0.721 0.609 0.557 0.505 0.461 0.411 0.343 1.000 0.929 0.634 0.346 0.266 0.178
		0 4 12 24 36 48 60 72 84 0 4 12 24 36	501 428 304 225 166 122 82 48 12 58 50 29	0 54 98 49 20 16 11 9 7 0 8 20 16	0.890 0.681 0.565 0.511 0.457 0.411 0.355 0.269 1.0000 0.8621 0.5147 0.2307 0.1597	0.0141 0.0215 0.0233 0.0240 0.0251 0.0261 0.0286 0.0370 0.0000 0.0453 0.0659 0.0560 0.0487	0.859 0.637 0.518 0.463 0.407 0.359 0.300 0.200 1.0000 0.7431 0.3794 0.1316 0.0788	0.915 0.721 0.609 0.557 0.505 0.461 0.411 0.343 1.000 0.929 0.634 0.346 0.266

CI: confidence interval; TNF- α : tumour necrosis factor- α .

Note: there were no overlaps in the confidence intervals comparing infliximab with adalimumab and etanercept at 24 months and thereafter.

Table SIV. Summary of treatment discontinuations that resulted in loss of drug survival

Reason for treatment	Treatment cycles, n (%) ^a			
discontinuation	Adalimumab	Etanercept	Infliximab	
<4 months				
Primary ineffectiveness	15 (44.1)	24 (48)	1(14)	
Loss of initial response	3 (8.8)	2 (4)	0 (0)	
Adverse event	7 (20.6)	8 (16)	3 (43)	
Patient wish	2 (5.9)	5 (10)	0 (0)	
Switch to another biologic agent	1 (2.9)	2 (4)	1 (14)	
Complete remission	1 (2.9)	4(8)	2 (29)	
Other	5 (14.7)	5 (10)	0 (0)	
Total	34	50	7	
≥4 months				
Primary ineffectiveness	34 (23.9)	31 (15.9)	4 (9.8)	
Loss of initial response	42 (29.6)	79 (40.5)	14 (34.1)	
Adverse event	10 (7.0)	19 (9.7)	4 (9.8)	
Patient wish	20 (14.1)	31 (15.9)	7 (17.1)	
Switch to another biologic agent	5 (3.5)	10 (5.1)	2 (4.9)	
Complete remission	9 (6.3)	7 (3.6)	4 (9.8)	
Other	22 (15.5)	18 (9.2)	6 (14.6)	
Total	142	195	41	

^aThe percentages refer to the total number of treatment cycles that were discontinued before, at or after 4 months of treatment.

Table SV. Mean PASI reduction scores^a achieved with anti-tumour necrosis factor-α agents and statistical comparison (intention-to-treat analysis)

	Mean-PASI-reduction score (treatment cycles, n)			<i>p</i> -value ^b		
Time-point (months)	Adalimumab	Etanercept	Infliximab	Adalimumab vs. Etanercept ^b	Adalimumab vs. Infliximab ^b	Infliximab vs. Etanercept ^b
4	3.1 (406)	3.4 (449)	3.0 (53)	7.6e-06*	0.66	0.02*
6	2.8 (363)	3.2 (412)	2.8 (45)	4.3e-05*	0.83	0.03*
12	2.4 (259)	2.9 (330)	3.1 (36)	1.9e-06*	0.002*	0.26
24	2.2 (152)	2.8 (246)	3.0 (17)	1.3e-07*	0.003*	0.34
36	2.3 (82)	2.8 (184)	2.3 (11)	1.1e-04*	0.95	0.15
48	2.3 (25)	2.7 (136)	2.5 (6)	3.6e-02*	0.67	0.46

^aAs described in Materials and Methods. ^bGeneralized estimating equation was used to compare effectiveness data. All statistical tests were 2-sided at the 0.05 significance level.

PASI: Psoriasis Area and Severity Index.

Table SVI. Psoriasis Area and Severity Index (PASI) reduction at 4 months achieved with anti-tumour necrosis factor-α agents for the different types of analyses

	Treatment cycles, n (%) ^a			
Category of PASI reduction	Adalimumab	Etanercept	Infliximab	
	Intention-to-treat an	alysis		
Complete remission	52 (12.8)	34 (7.6)	8 (15.1)	
PASI 90	145 (35.7)	95 (21.2)	27 (50.9)	
PASI 75	264 (65.0)	223 (49.7)	37 (69.8)	
PASI 50	333 (82.0)	365 (81.3)	47 (88.7)	
	Per-protocol analysi	s, as described in Materia	als and Methods	
Complete remission	49 (12.7)	30 (7)	6 (11.1)	
PASI 90	140 (36.6)	90 (21)	25 (46.3)	
PASI 75	255 (66.1)	215 (50.1)	35 (64.8)	
PASI 50	321 (83.2)	353 (82.3)	45 (83.3)	

^aThe percentages refer to the total number of treatment cycles that were available at 4 months of treatment.

PASI 90, PASI 75 or PASI 50, reduction of PASI by at least 90%, 75% or 50%, respectively, from start of treatment.

Table SVII. Correlation of drug survival and effectiveness for anti-tumour necrosis factor-α agents

Anti TNF-α agent	Spearman's correlation coefficient ^a	Treatment cycles, n	<i>p</i> -value
Adalimumab	-0.29	176	0.00018
Etanercept	-0.16	245	0.01
Infliximab	-0.14	48	0.34

Spearman's correlation testing was done with length of drug survival and mean Psoriasis Area and Severity Index (PASI) reduction score (1–5 as described in Materials and Methods).

^aNegative coefficient indicates positive correlation of effectiveness and length of drug survival (the negative sign arises from the fact, higher effectiveness is the same as a lower PASI reduction score).