HLA-B27 positive. In total, 254 (66%) patients started TNF-α inhibitors and 139 (34%) patients received conventional treatment. Patient characteristics were comparable between both groups, except higher disease activity, more often peripheral arthritis, and worse physical functioning in patients starting TNF-α inhibitors. NSAID use and disease activity reduced significantly after starting TNF-α inhibitors and remained low and stable during follow-up. In the conventional treatment group, disease activity was low and NSAID remained stable at all visits. GEE analysis over time showed that NSAID use was significantly associated with disease activity (Table 1). In the TNF-α inhibitor group, a significant association of all NSAID parameters with ASDAS was found: NSAID use yes vs. no, ASAS-NSAID index, index ≥10 vs. <10, and index ≥90 vs. <90. Comparable results were found for BASDAI and CRP. The association between NSAID use and ASDAS remained significant in the 217 patients who used TNF-α inhibitors more than 80% of the follow-up time and when analyzing only 12 to 52 weeks of follow-up to exclude the initial effect of TNF-α inhibitors, although the regression coefficients were lower in these last analyses. In the conventional treatment group, a significant but less prominent association of NSAID parameters with ASDAS was found: NSAID use yes vs. no, index ≥10 vs. <10, and index ≥90 vs. <90. BASDAI was only significantly associated with on demand NSAID use. For CRP, no significant associations with NSAID use were found.

Table 1. Association between ASDAS and NSAID use over time in AS patients.

		B (95% CI)	P-value	Interval	n
TNF-α Inhibitors					
NSAID use Yes	Complete group	0.825 (0.664-0.985)	**<0.001**	1074	251
ASAS-NSAID index	Complete group	0.009 (0.007-0.012)	**<0.001**	1073	251
	TNF-α≥80%*	0.011 (0.009-0.013)	**<0.001**	953	214
	12-52 weeks**	0.005 (0.003-0.007)	**<0.001**	633	246
ASAS-NSAID index≥10	Complete group	0.831 (0.672-0.990)	**<0.001**	1073	251
ASAS-NSAID index≥90	Complete group	0.855 (0.682-1.028)	**<0.001**	1073	251
Conventional treatment					
NSAID use Yes	Complete group	0.250 (0.006-0.493)	**0.045**	315	131
ASAS-NSAID index	Complete group	0.002 (0.000-0.005)	0.059	314	131
ASAS-NSAID index≥10	Complete group	0.223 (0.022-0.425)	**0.030**	314	131
ASAS-NSAID index≥90	Complete group	0.269 (0.038-0.501)	**0.023**	314	131

*Subgroup analysis of patients who used TNF-α inhibitors ≥80% of the follow up time. ** Analysis for 12 to 52 weeks of follow-up (excluding baseline and 6 weeks).

Conclusions: In this observational cohort of established AS patients, NSAID use over time was significantly associated with ASDAS, which was most pronounced for patients treated with TNF-α inhibitors.

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SAT0417 GRADUAL PROGRESSIVE CHANGE TO EQUAL PREVALENCE OF ANKYLOSING SPONDYLITIS AMONG MALES AND FEMALES IN SWITZERLAND: DATA FROM THE SWISS ANKYLOSING SPONDYLITIS SOCIETY (SVMB)

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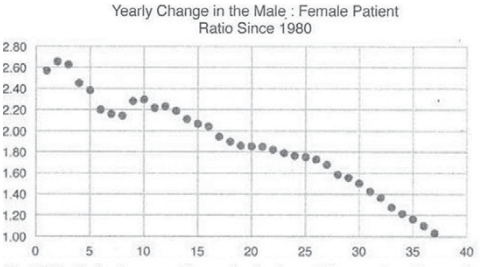
Background: Classic ankylosing spondylitis (AS) with radiographic sacroiliitis has long been considered to be more common in men than women. But this difference has gradually decreased with increasing recognition of this condition in women so that the more recent data suggest a range of 2:1 to 1.2:1 ratio in favor of men [1].

Objectives: To document greater disease recognition in women during the last 30 years in Switzerland as reflected by AS patient membership in the Swiss Ankylosing Spondylitis Society (SVMB) since its foundation in 1978 [2].

Methods: We reviewed the Society's quarterly newsletters that have kept record since 1980 not only of the number of members, but also the percentage of males and females AS patients. We calculated yearly AS patient membership and also change in the male/female patient ratio (M:F).

Results: There has been a progressive decline in the M:F ratios since 1980 as shown in the Figure. There were 44 female forming 28% of the patient population, with a M:F ratio of 2.57 in 1980. At the end of 2016, there are 1731 females forming 49% of the total number of patients, and the M:F ratio is now 1.03.



The M:F ratio is shown on the vertical axis, and the number of years is shown on the horizontal axis.

Conclusions: AS is now being recognized as often in females as in males, as reflected in the membership of SVMB over the last 36 years. There can be various reasons for this observation, one of them being the availability of better imaging tools to recognize AS/axial spondyloarthritis (axSpA), especially among women whose disease is clinically and radiologically less pronounced and is therefore often overlooked [2]. For example, the use of MRI (for early detection of spinal inflammation) and the ASAS criteria have resulted in >50% females in a German cohort of patients with nonradiographic axSpA [3]. SVMB has played a major role in achieving greater disease recognition in Switzerland by increasing disease awareness and educating patients and their families, the general public, the governing bodies and the allied health professionals about AS, and by interacting closely with rheumatologists. Other possible factors influencing our data include: women outliving men, forming a little greater percentage of the general population, and possibly more likely to join patient self-help groups and societies, We did not investigate any gender difference in disease severity and clinical presentation. In conclusion, AS/axSpA almost equally afflicts men and women in Switzerland.

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SAT0418 ANXIETY AND DEPRESSION ON DISEASE ACTIVITY AND QUALITY OF LIFE OF SPONDYLOARTHRITIS PATIENTS UNDER BIOLOGIC THERAPIES

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Background: Several studies describe an association between anxiety, depression and disease activity in Spondyloarthritis (SpA).

Abstract SAT0418 – Table 1. Comparison of anxious vs non-anxious and depressive vs non-depressive patients

	HADS-A<8	HADS-A ≥8	*p*-value	HADS-D<8	HADS-D≥8	*p*-value
Current age, mean±SD (years)	48.9±11.9	52.6±10.8	0.045	49.2±11.4	53.2±11.5	0.072
Age at diagnosis, mean±SD (years)	34.3±11.9	40.2±11.5	0.004	34.9±11.5	40.9±12.5	0.015
Age at 1st bDMARD, mean±SD (years)	44.0±11.9	48.7±10.64	0.013	44.7±11.5	48.7±11.6	0.059
HADS-A, mean±SD	3.2±2.1	10.2±2.1	–	4.5±3.4	9.7±3.1	<0.001
HADS-D, mean±SD	2.9±3.3	8.3±2.7	<0.001	2.98±2.5	10.3±2.3	–
ASQoL, mean±SD	3.12±3.8	10.6±4.5	<0.001	4.6±4.7	9.63±5.8	<0.001
BASMI, mean±SD	3.1±1.8	3.9±1.6	0.003	3.2±1.7	3.9±1.6	0.016
BASFI, mean±SD	1.7±1.6	4.1±2.3	<0.001	2.0±1.7	4.3±2.6	<0.001
BASDAI, mean±SD	1.98±1.6	4.5±2.1	<0.001	2.4±1.9	4.5±2.3	<0.001
ASDAS, mean±SD	2.3±1.3	2.6±1.1	0.002	2.3±1.2	2.7±1.2	0.006
Patient's pain assessment (VAS), mean±SD	23.96±21.8	41.2±22.1	0.020	29.1±23.3	38.2±23.0	0.226
Patient's global assessment (VAS), mean±SD	19.1±19.9	42.8±23.1	<0.001	22.9±21.6	42.6±24.5	<0.001
physician's global assessment (VAS), mean±SD	10.6±12.9	20.1±16.8	<0.001	10.8±12.4	23.95±17.8	<0.001
TJC, mean±SD	1.4±4.2	4.3±9.99	0.002	1.79±5.3	4.45±10.3	0.002
FACIT-F, mean±SD	42.4±7.8	29.5±8.2	<0.001	40.4±8.6	29.3±9.5	<0.001
EQ5D, mean±SD	0.51±0.11	0.29±0.19	<0.001	0.48±0.13	0.28±0.23	<0.001