Table 1

	RA (n=352)	AS (n=442)	PSA (n=133)	p-value*
Female	257 (73.0%)	104 (23.5%)	58 (43.6%)	<0.001 ^{ABC}
Disease duration	7.1±5.7	7.0±6.7	7.5±7.2	0.245
Age at start of anti-TNF therapy	47.2±8.9	39.5±8.6	44.4±9.1	<0.001 ^{ABC}
HAQ	1.5±0.5	1.2±0.5	1.2±0.6	<0.001 ^{AB}

Post-hoc analysis (with Bonferroni correction): statistically significant difference btw groups A) RA vs. AS, B) RA vs. PSA, C) AS vs. PSA. Values or N (%) or mean (SD).

Table 2

Dg.	WPAI-SHP component	Baseline	12 months	Mean change after 12 months	N†	P-value*
RA	Absenteeism	12.8 (27.9)	5.1 (18.5)	7.7 (30.3)	203	<0.001
	Presenteeism	52.1 (21.9)	27.6 (20.9)	24.5 (26.3)	183	<0.001
	Overall work impairment	53.9 (22.8)	28.7 (22.0)	25.2 (26.9)	183	<0.001
	Activity impairment	62.4 (21.4)	36.0 (23.0)	26.4 (27.7)	352	<0.001
AS	Absenteeism	10.6 (25.6)	3.5 (15.8)	7.1 (28.0)	307	<0.001
	Presenteeism	53.1 (22.2)	21.1 (18.0)	32.0 (24.9)	282	<0.001
	Overall work impairment	54.8 (22.6)	21.8 (18.8)	33.0 (25.5)	281	<0.001
	Activity impairment	60.7 (22.1)	27.3 (21.4)	33.5 (26.4)	442	<0.001
PSA	Absenteeism	5.7 (17.3)	4.2 (18.4)	1.5 (24.6)	90	0.135
	Presenteeism	43.9 (24.0)	15.3 (16.2)	28.6 (24.5)	84	<0.001
	Overall work impairment	45.2 (25.0)	15.9 (16.8)	29.3 (25.1)	84	<0.001
	Activity impairment	57.4 (24.6)	26.2 (21.3)	31.2 (26.5)	133	<0.001

†N = Number of assessed patients. Values are mean % (SD). *Wilcoxon paired test for difference between baseline and 12 months within each WPAI score.

69→64%, p=0.013), but not in AS (77→78%) or PSA (77→73%). In patients employed for pay both at baseline and after 12 months, all WPAI-SHP scores improved significantly over one year of anti-TNF therapy (Table 2).

Conclusions: In the real life setting of the Czech Republic, anti-TNF therapy effectively reduced absenteeism, presenteeism, activity impairment and work impairment over one year in employed patients with RA, AS and PSA.

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THU0651 SHOULD WE REDUCE THE DOSE OF BIOLOGICAL THERAPY TO ALL PATIENTS WITH INFLAMMATORY ARTHRITIS ACHIEVING SUSTAINED THERAPEUTIC GOAL?

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Background: Dose tapering of biological therapies (BT) in patients with rheumatoid arthritis (RA) or spondyloarthritis (SpA) is frequent in Spain. However, there is variability in BT optimization (BTO). So, Spanish Society of Rheumatology published in 2015 recommendations on how to optimize BT (1). Nevertheless, there is no solid evidence on which patient profiles BTO is appropriated.

Objectives: To develop appropriateness criteria for BTO in patients with RA, axial SpA (axSpA) or peripheral SpA (pSpA)

Methods: The RAND/UCLA appropriateness method was used. Five rheumatologists experienced in RA and/or SpA clinical research selected and defined the variables considered relevant when deciding reduction of BT in order to define patient profiles. Ten BT experienced rheumatologists anonymously rated 1 (completely inappropriate) to 9 (completely appropriate) each profile after reading evidence synthesis. Then, in a meeting, classification variables and profiles with disagreement were revised and all profiles were scored again. Profiles with a median score >6 were considered appropriate, those with a median score <3.5 were considered inappropriate and the remaining uncertain. In addition, a study of the prevalence of these profiles was performed in 9 Spanish hospitals.

Results: Combining the options of variables 2,304 different profiles were obtained for RA, 768 for axSpA, and 3,072 for pSpA. 327 (14.2%) profiles in RA, 80 (10.4%) in axSpA, and 154 (5%) in pSpA were considered appropriate for BT dose reduction. By contrast, 749 (53.3%) profiles in RA, 270 (54.4%) in axSpA, and 1243 (54.5%) in pSpA were considered inappropriate. The remaining profiles were considered uncertain. In the preliminary study to determine profiles prevalence, we collected information from 242 RA, 171 axSpA and 172 pSpA patients that underwent BTO. We found that BTO was performed appropriately in 23% RA, 67% axSpA and 61% pSpA patients. BTO was indicated in uncertain profiles in 67% RA, 23% axSpA and 37% pSpA patients. Only in RA we detected BT dose reduction in patient profiles considered inappropriate (2%).

Conclusions: Appropriateness criteria for BT dose reduction in three inflammatory conditions were developed and the preliminary prevalence study suggests that BTO was wisely applied. However, further research in this field is needed to determine the real prevalence of clinical profiles of patients undergoing BTO in daily clinical practice and validate these criteria in real life.

References:

[1] Gonzalez-Alvaro I et al. Rheumatology 2015; 54: 1200–1209.

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THU0652 ASSESSMENT OF BIOSIMILARS USING REAL WORLD DATA: THE COMPLEXITY OF CHOOSING A COMPARATOR AND UNDERSTANDING UPTAKE

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Background: The introduction of biosimilars has been linked with concerns regarding how to best monitor their similarity vs. the originator product using real world data.

Methods: Data from the Swedish Rheumatology Quality register (SRQ) was used to identify all patients with rheumatoid arthritis (RA), ankylosing spondylitis (AS), psoriatic arthritis (PsA), and other spondyloarthropathy (SpA), who started a treatment with infliximab (originator Remicade or biosimilars Remsima or Inflectra) between 1st Mar 2015 and 30th Sept 2016 or with etanercept (originator Enbrel or biosimilar Benepali) between 1st April 2016 and 30th Sept 2016.

Results: During the study period, a total of 1833 patients started an infliximab treatment and 1793 started etanercept. These patients were either bDMARD-naïve (patients without a history of any biological treatment), non-medical switchers (patients who switched from the originator product), or patients who had a history of a previous (but not the same) bDMARD (Table 1). These three groups were not evenly distributed across originators or biosimilars, and had different baseline demographic and disease characteristics.

The uptake in terms of treatment starts was faster for Benepali (it covered more than 90% of this part of the etanercept market after only 3 months) as compared to Remsima and Inflectra (together they accounted for 88% of this section of the infliximab market after 10 months). The uptake of biosimilars in terms of proportion of all patient on treatment was, at the end of September 2016, 27%

Table 1. Number of patients starting infliximab (from 1 March 2015 to 30 September 2016) or etanercept (from 1 April 2016 to 30 September 2016) originator or biosimilar, by line of treatment

	Infliximab		Etanercept	
	Originator	Biosimilars	Originator	Biosimilar
Total	570	1263	186	1607
Bio-naïve	379 (66%)	508 (40%)	89 (48%)	581 (36%)
Non-medical switchers	—	524 (42%)	—	710 (44%)
Switchers from other biologics	191 (34%)	231 (18%)	97 (52%)	316 (20%)

Figure 1. Number of patients starting, and on, respectively, infliximab or etanercept by month. Green: total, red: biosimilar, blue: originator.