THU0619 PREVALENCE OF PNEUMOCOCCAL VACCINATION IN RHEUMATOLOGIC PATIENTS WITH COMMUNITY ACQUIRED PNEUMONIA. BIOBADASAR REGISTRY

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Background: Biobadasar is a registry that monitors adverse events in patients who use biological treatments in rheumatologic diseases conducted by the Argentine Society of Rheumatology. As in others international registries the community acquired pneumonia (CAP) has been detected as one of the most frequent infectological adverse events. Although all immunosuppressed patients should be vaccinated against streptococcus pneumoniae, there is a proportion of patients who are not.
Objectives: Evaluate the prevalence of pneumococcal vaccination in patients with CAP within the Biobadasar database. Assess factors associated with Severe CAP in these patients.
Methods: A cross-sectional, multicentric study was made in BIOBADASAR database from 2010 to2016.
In patients who reported CAP data of demographics, comorbidities and state of pneumococcal immunization was collected. Microbiological data, treatment and outcome of the event were considered. The severity of CAP was assessed according to the opinion of the attending physician, hospitalization, risk of life and/or death. Values are expressed as mean ± standard deviation, median (ranges) and frequencies (percentages), as appropriate. We performed bivariate and multivariate logistic regression analysis to identify variables associated with the event.
Results: Of the 4029 patients enrolled in the registry, the cumulative incidence of CAP was 4.2% (n 170), 72.4% (n 123) were women. The mean age was 57 (SD +/- 14.5). Biological treatment was found in 81.8% (n 139). Patient s that have received the pneumococcal vaccine were 40.6% (n=69). Severe CAP was detected in 7.1%. Streptococco Pneumoniae was the main pathogen isolated in 13% of the cases. Overall mortality was 4.1%. In the univariate analysis for severe CAP we found statistical significance for Smoking OR 3.88, CI95 1.063–14.22, p= 0.029 and chronic kidney disease (CKD) OR 31, CI95 2.6–376, p= 0.007. When performing a multiple logistic regression model, only renal failure OR 7.39 CI95 0.003–0.38 p= 0.007 was a predictor of severe CAP. Not significative association with immunosuppressive treatment (p: 0.09), age (p: 0.464), or vaccination (p: 0.937)
Conclusions: The annual incidence of CAP in Argentina varies between 0.5 - 1.1% while in our cohort it was four times higher. The prevalence of pneumococcal vaccination was less than 50%, showing that, although the literature and guidelines establish the need for vaccination, this is not so in the real world. In the multivariate analysis, only CKD was related to severe CAP. Although in the univariate analysis the CKD and the smoking habit represented factors associated with severity. We must emphasize the medical education in following the international vaccination guidelines.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.5282

THU0620 PERSISTENCE WITH BIOLOGICAL DISEASE-MODIFYING ANTIRHEUMATIC DRUGS – A RETROSPECTIVE DATABASE STUDY IN JAPANESE PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Persistence rate is one of the key benefits of biological disease-modifying antirheumatic drugs (bDMARDs) in the treatment of rheumatoid arthritis (RA). Limited evidence of persistence has been found in Japan and the results are not transferrable across countries and cultures (1–3). In addition, the impact of persistence on healthcare cost is still questionable.
Objectives: To assess persistence rates of bDMARDs for the treatment of RA in Japan and compared resource utilization and treatment costs between persistence and non-persistence groups.
Methods: Data was extracted from a Japanese claims database that included 4,400,000 patients between 2009 and 2015. RA patients who initiated bDMARD treatment (bDMARD-naïve patients) were identified and included in the final analysis. Survival analysis was used to estimated 6-, 12-, and 18- month persistence rates for current bDMARDs. Propensity score matching was applied to control for potential treatment selection bias. Resource utilization and health care costs of treatments were calculated 12 months before and after initiation of bDMARDs treatment and compared between persistence and non-persistence groups.
Results: A total of 6,153 bDMARD-naïve patients were included in the final analysis. The overall 1-year persistence rate was 85% (95% CI, 84–86). Persistence of patients treated with golimumab was higher [92% (95% CI, 89–94)] than that with other bDMARDs. Overall, 1-year outpatient visits increased from 10 at baseline to 16 after bDMARD treatment, while the number of hospital admissions declined from 3.3 to 1.6. Hospital days decreased from 17 at baseline to 12 following treatment. The non-persistence group had a larger increase in outpatient visits after bDMARD initiation compared with the persistence group (8 to 16 vs. 10 to 16, respectively) and a smaller decrease in hospital admissions (3.1 to 1.9 vs. 3.5 to 1.4, respectively). Compared to non-persistence group, persistence was associated with a reduction in total healthcare costs of 760 USD.
Conclusions: Japanese bDMARD-naïve patients with RA have a high persistence rate of bDMARDs. The reduction in medication costs in non-persistent patients is offset by higher hospitalization costs, making non-persistence more expensive.
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Disclosure of Interest: J. Mahlich Employee of: Janssen Pharmaceutical KK, H. Kameda Grant/research support from: Abbvie GK, Astellas Pharma, Chugai Pharmaceutical Co, Ltd., Eisai Co. Ltd., Mitsubishi Tanabe Pharma Co., Nippon Kayaku Co. Ltd., Santen Pharmaceutical Co. Ltd., Takeda Pharmaceutical Co. Ltd, Consultant for: Eli Lilly Japan K.K., Novartis Pharma K.K. and Sanofi K.K., Speakers bureau: AbbVie GK, Astellas Pharma, Bristol– Myers K.K., Chugai Pharmaceutical Co. Ltd., Eisai Co. Ltd., Janssen Pharmaceutical K.K., Mitsubishi Tanabe Pharma Co., Nippon Kayaku Co. Ltd., Pfizer Japan Inc., Santen Pharmaceutical Co. Ltd. and Takeda Pharmaceutical Co. Ltd. and UCB Pharma, R. Sruamsiri Employee of: Janssen Pharmaceutical KK
DOI: 10.1136/annrheumdis-2017-eular.2102

THU0621 COMPARISON OF THE EFFECT OF ANTI-TNF THERAPY ON WORK DISABILITY BETWEEN PATIENTS WITH RHEUMATOID ARTHRITIS, ANKYLOSING SPONDYLITIS AND PSORIATIC ARTHRITIS OVER ONE YEAR– REAL LIFE DATA FROM THE CZECH BIOLOGICS REGISTRY ATTRA

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Objectives: To compare the effect of anti-TNF therapy (a-TNF-th) on Work Disability (WD) between RA, PSA and AS. In the Czech Republic (CZ), a-TNF-th is reimbursed for RA if DAS28>5.1 despite therapy with csDMARDs, for PSA if disease is not "adequately controlled" with csDMARDs, and for AS if BASDAI>4 and CRP/ESR elevated above normal. More than 95% of anti-TNF treated patients in CZ are followed up in the ATTRA registry.
Methods: Bionäive patients with RA (n=1085), AS (n=1126) and PSA (n=351) starting a-TNF-th with available baseline data on demography, disease duration and physical function, and on working status at baseline and at 12 months were included in the analysis. Patients older than 60 years, on maternity leave or students were excluded. Work status was self-reported by patients as (A) able to work = [(i) employed, or (ii) unemployed and actively seeking employment], or (B) unable to work = [(iii) on sick leave, or (iv) on disability pension]. Regression analyses were performed to examine the predictors of improvement in WD (change B→A coded as 1, B→A as -1, no change as 0) over 1 year.

Table 1. Baseline characteristics

	RA (n=1085)	AS (n=1126)	PSA (n=351)	p-value
Female	836 (77.1%)	263 (23.4%)	161 (45.9%)	**<0.001**[ABC]
Disease duration	8.2±6.6	7.5±6.9	8.2±7.2	**0.002**[A]
Age at start of anti-TNF Therapy	46.6±9.0	38.2±8.8	44.1±9.3	**<0.001**[ABC]
HAQ	1.5±0.6	1.1±0.5	1.2±0.6	**<0.001**[ABC]
Calendar year of starting anti-TNF				
before 2008	420 (38.7%)	306 (27.2%)	90 (25.6%)	**<0.001**[AB]
2009–2012	394 (36.3%)	427 (37.9%)	156 (44.4%)	
2013–2015	271 (25.0%)	393 (34.9%)	105 (29.9%)	

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. Prediction of improvement in work disability

Independent variable	Univariate analysis		Multivariate analysis	
	OR (95% CI)	p-value	OR (95% CI)	p-value
Diagnosis				
RA	*reference*		*reference*	
AS	**1.477 (1.150; 1.898)**	**0.002**	**1.466 (1.044; 2.058)**	**0.027**
PSA	1.206 (0.840; 1.731)	0.310	1.226 (0.838; 1.792)	0.293
Female	0.821 (0.651; 1.034)	0.093	0.988 (0.754; 1.295)	0.932
Age at start of anti-TNF therapy	**0.983 (0.971; 0.994)**	**0.004**	0.987 (0.974; 1.001)	0.067
Disease duration	0.992 (0.975; 1.009)	0.341	0.998 (0.980; 1.016)	0.840
HAQ	1.024 (0.839; 1.251)	0.815	1.181 (0.949; 1.470)	0.135
Calendar year of starting anti-TNF				
before 2008	*reference*		*reference*	
2009–2012	0.843 (0.639; 1.113)	0.228	0.799 (0.601; 1.062)	0.122
2013–2015	1.075 (0.804; 1.438)	0.624	1.001 (0.741; 1.352)	0.995