Abstract THU0667 – Table 1

	N (%) or mean (SD) score	Univariable analyses R (95%CI)*	Multivariable analysis R (95%CI)*
RAID score	5.2 (2.2)	1.96 (1.80, 2.12)	1.59 (1.41, 1.78)
Job requires using a lot of force, e.g. lifting, pulling or use of tools and machines using a lot of force:			
• Never/Rarely	528/865 (62%)	1	
• Sometimes	166/853 (19%)	0.83 (-0.3, 2.03)	
• Often/Always	159/853 (19%)	2.48 (1.26, 3.70)	
Job requires a lot of standing:			
• Never/Rarely	385/853 (45%)	1	
• Sometimes	147/853 (17%)	0.44 (-0.85, 1.73)	
• Often/Always	321/853 (38%)	1.90 (0.90, 2.91)	
Job requires use of computer for more than 4 hours:			
• Never/Rarely	225/853 (26%)	1	
• Sometimes	93/85 (11%)	0.67 (-0.98, 2.33)	
• Often/Always	535/853 (63%)	-0.20 (-1.26, 0.86)	
Able to influence work:			
• Never/Rarely	214/852 (25%)	1	1
• Sometimes	244/852 (29%)	-2.13 (-3.33, -0.94)	-1.02 (-2.02, -0.03)
• Often/Always	394/852 (46%)	-4.33 (-5.42, -3.24)	-1.87 (-2.95, -0.80)
Able to take time off, small breaks, when needed:			
• Never/Rarely	268/853 (31%)	1	
• Sometimes	213/853 (25%)	-1.73 (-2.92, -0.54)	
• Often/Always	372/853 (44%)	-3.22 (-4.27, -2.17)	
How often do you get help and support from colleagues:			
• Never (reference)	67/773 (9%)	1	
• Sometimes	365/773 (47%)	-1.94 (-3.65, -0.19)	
• Often/Always	341/773 (44%)	-2.94 (-4.71, -1.17)	
PASS			
• Acceptable	387/786 (49%)	1	1
• Not acceptable	399/786 (51%)	7.10 (6.34, 7.86)	2.65 (1.78, 3.52)

Conclusions: In this large national survey in patients with RA we found that not only disease activity, but also having control, especially the flexibility to influence work and take breaks when needed, were associated with levels of presenteeism. Preventing presenteeism should therefore be aimed at managing the disease, but also toward adapting work circumstances and finding the right balance between work requirements and personal needs.

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THU0668

CHOICE OF INITIAL BIOLOGIC DISEASE-MODIFYING ANTIRHEUMATIC DRUG IMPACTS HEALTHCARE RESOURCE USE AMONG PATIENTS WITH RAPIDLY PROGRESSING RHEUMATOID ARTHRITIS

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Background: Current management of rheumatoid arthritis (RA) in the United States is often directed by payer medical policy, typically requiring a tumour necrosis factor- α inhibitor (TNFi) as a first-line (1L) biologic disease-modifying antirheumatic drug (bDMARD). Recent studies¹ suggest clinical subsets of patients with RA may benefit from early intervention with a non-TNFi bDMARD.

Objectives: To characterise 6 month healthcare resource utilisation (HRU) for patients with RA in the United States when treated with different 1L bDMARDs (1L TNFi or 1L abatacept) and assess the impact of initial bDMARD selection on 6 month HRU.

Methods: Early, rapidly progressive RA (eRPA) is a recognised clinical entity comprising a constellation of clinical and biomarker features: anti-cyclic citrullinated peptide-2 positivity (ACCP+), DAS28 (CRP) ≥ 3.2 , symptomatic synovitis in ≥ 2 joints for ≥ 8 weeks and onset of symptoms ≤ 2 years. Physicians with adult RA patients meeting these criteria for eRPA used patient medical records to provide patient data via an electronic case report form. Patients received either abatacept or TNFi in 1L. Patient characteristics and HRU in the first 6 months of bDMARD treatment were summarised and compared across treatment groups. Odds ratios (OR) of HRU were estimated using multivariable logistic regression to adjust for baseline indicators of disease severity and patient mix (age, sex, race, ethnicity, region, payer type, time from RA diagnosis to bDMARD start, baseline concomitant medication use, baseline swollen joint count [SJC], tender joint count [TJC], Clinical Disease Activity Index [CDAI], extra-articular manifestations).

Results: There were 60 abatacept and 192 TNFi patients in 1L. Mean ages at bDMARD start were 49.1 and 49.9 years, and mean times from RA diagnosis to bDMARD initiation were 1.5 and 6.4 months for abatacept and TNFi users, respectively (all $p > 0.05$). At bDMARD start, patients with eRPA treated with abatacept or TNFi, respectively, had mean SJC of 6.8 and 7.3, TJC of 10.4 and 10.2, ESR of 39.8 and 44.0 mm/h, CRP of 8.1 and 8.2 mg/L and numbers of bony erosions of 1.2 and 1.7 (all $p > 0.05$). 45% and 47% ($p > 0.05$) of abatacept and TNFi users, respectively, had concomitant oral corticosteroids at bDMARD start. A lower proportion of patients treated with abatacept had hospitalizations (72 vs 88%), emergency department (ED) visits (75 vs 90%) and MRI (65 vs 82%) (all $p < 0.05$), while use of ultrasound (82 vs 88%) and radiography (88 vs 93%) during the first 6 months of bDMARD treatment was similar. After adjusting for patient

characteristics, those treated with 1L abatacept had significantly lower odds of hospitalisation (OR 0.42; 95% CI 0.18, 0.95), ED visits (OR 0.39; 95% CI 0.16, 0.93) and MRI (OR 0.45; 95% CI 0.21, 0.97) compared with 1L TNFi (all $p < 0.05$). Adjusted odds of achieving CDAI low disease activity within 100 days of bDMARD favoured 1L abatacept vs 1L TNFi (OR 3.26; 95% CI 1.32, 8.07; $p < 0.05$).

Conclusions: After adjusting for baseline disease severity, patients treated with 1L abatacept were less likely to have hospitalizations, ED visits and MRIs during the first 6 months of bDMARD treatment compared with those who received a 1L TNFi.

REFERENCE:

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Disclosure of Interest: A. Klink Consultant for: Bristol-Myers Squibb, Janssen, Celgene, EMD Serono, Ipsen, Kite, Merck, Novartis, Vertex, Amgen, Astellas, Heron, AbbVie, Array, Seattle Genetics, Employee of: Cardinal Health, K. Tuell Employee of: Bristol-Myers Squibb, R. Szymialis Shareholder of: Bristol-Myers Squibb, Employee of: Bristol-Myers Squibb, T. Curtice Employee of: Bristol-Myers Squibb, K. Gupta: None declared, D. Nero Consultant for: Bristol-Myers Squibb, Employee of: Cardinal Health, B. Feinberg: None declared

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THU0669

A SELF-REPORT SYMPTOM CHECKLIST ON A MULTIDIMENSIONAL HEALTH ASSESSMENT QUESTIONNAIRE (MDHAQ) TO CAPTURE A “POSITIVE REVIEW OF SYSTEMS” AS A STANDARD, QUANTITATIVE, AND INFORMATIVE “SCIENTIFIC” CLUE TO FIBROMYALGIA SIMILAR TO MODIFIED CRITERIA FOR FIBROMYALGIA

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Background: The scientific method is based on recording information as quantitative standard data rather than as narrative descriptions, to test possible value in diagnosis, management, and outcomes. This approach generally is applied to laboratory tests and other data from high technology sources. However, information from a patient history and physical examination can be analysed for scientific validity if collected in as standard, quantitative and reproducible data. A symptom checklist of 60 items was initially designed as a review of systems to screen for symptoms and possible adverse events of medications, for which it has been helpful. It has also been observed that patients who report a large number of symptoms may provide a clue to the presence of fibromyalgia (FM); Clin Exp Rheumatol. 2004. 22:453–61).

Objectives: To compare results of a 60-item symptom checklist on a multidimensional health assessment questionnaire (MDHAQ) vs the modified 2016 revised preliminary diagnostic criteria for fibromyalgia (Sem Arth Rheum 46:319–329, 2016).

Methods: All patients seen at an academic rheumatology clinic complete an MDHAQ; J Rheumatol 2005 32:1432–9) at each visit, which includes a 60-item symptom checklist. In April-July 2017, patients also completed a questionnaire to identify the 2016 revised preliminary diagnostic criteria for FM. The likelihood of reporting each symptom by a patient with RA who did not have FM was compared to patients who met 2016 criteria for FM using a chi-square test. Receiver operator characteristic (ROC) curves were performed of the 60 symptom checklist as well as the 10 most discriminatory symptoms vs the FM criteria.

Abstract THU0669 – Table 1. Proportion of patients with rheumatoid arthritis (RA) who did not meet fibromyalgia criteria versus patients with primary or secondary fibromyalgia to meet fibromyalgia criteria who responded positively regarding the 10 most discriminatory symptoms on a symptom checklist

Symptom	RA (84)	FM (110)	Chi2*
Muscle pain, aches, or cramps	30 (35)	100 (31)	65.6367
Muscle weakness	16 (19)	82 (75)	58.6852
Dizziness	11 (13)	65 (59)	42.2875
Headaches	25 (30)	84 (76)	42.0177
Problems with thinking	7 (8)	57 (52)	40.7405
Problems with memory	12 (14)	65 (59)	39.9442
Neck pain	29 (35)	87 (79)	39.3505
Problems with sleeping	30 (36)	88 (80)	39.2017
Numbness or tingling of arms or legs	16 (19)	70 (64)	38.3709
Unusual fatigue	23 (27)	79 (72)	37.7207

*all $p < 0.001$

Results: We studied 84 patients with RA who did not meet FM criteria vs 110 patients who met FM criteria – no differences were seen between patients with primary or secondary FM who met criteria. Patients who met FM criteria were more likely to report each of the 60 symptoms. The 10 symptoms that were most discriminatory of RA vs FM are illustrated in the table 1. A ROC curve for the 60 symptoms vs the FM Criteria had an area of 0.896 (Confidence interval 0.872–0.925), and for the 10 most discriminatory symptoms of 0.8975 (Confidence interval 0.8667–0.928).

Conclusions: A simple MDHAQ symptom checklist may be informative in routine rheumatology care to identify possible primary and secondary FM in agreement with FM criteria. The MDHAQ may provide a useful and feasible alternative to FM Criteria for busy clinical settings.

Disclosure of Interest: T. Pincus Shareholder of: Dr. Pincus holds a copyright and trademark on MDHAQ and RAPID3 for which he receives royalties and license fees. All revenue is used to support further development of quantitative questionnaire measures for patients and doctors in clinical rheumatology care., S. Jamal: None declared, I. Castrejon: None declared

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THU0670 A REUMATOLOGIST'S EVALUATION OF HOW EFFICIENCIES IN THE MANAGEMENT OF PAINFUL LUMBAR SYNDROME IN WORK DISABILITY CREATES BENEFITS & SAVINGS

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Background: Musculoskeletal disorders are the most important cause of sick leave in the world.¹ Lumbar pain is the main cause of temporary incapacity with significant socio-economic impact.

Objectives: Test efficiency of Healthcare approach by rheumatologist as savings in indirect costs e.g days off work and in direct costs derived from medical assistance in controlled patient group on sick leave diagnosed with lumbar pain.

Methods: 2 year quasi-experimental bi-directional analytical design trial. Retrospective cohort in Control Group- CG and prospective cohort for intervention group -IG. Two groups, IG and CG respectively contain 150 (56% women aged 47.5 years±10) and 172 (48.8% women aged 44.2 years±10) working age patients with lumbar pain. Study made by Program for the Management of Temporary Disability implemented by Rheumatology Service of University Hospital of the Canary Islands. Study included early intervention, protocol in diagnostic tests and treatment. This study was evaluated by the Ethics Committee of the research of the University Hospital of Canary Islands fulfilling the requirements of suitability.

Results: 24% of patients of IG fit to return to work after first appointment. Maximum efficiency of study between 30th and 45th day of sick leave. At 45 days 8% IG and 18,6% CG remained on sick leave. Average reduction 26 days of sick leave respect to CG, a total saving of 6.182 days of sick leave over 1 year, with efficiency of 62,2%. Saving in direct costs in IG over CG: medicaments, complementary tests, inter-consultations, follow up 48%. Absolute saving of 38.891€, or equivalent 256.680€ for 1.000 patients. National Institute of Social Security Indirect sick leave costs 67,1%. Absolute saving of 129.883€, or equivalent of 857.227€ for 1.000 patients. Indirect costs savings for Employers for intervention 50%. Absolute saving 108.649€, or equivalent to 717.083€ for 1.000 patients. Workers in program saved 50% in salary loss. Average saving 605€/worker. Total saved by implementation of program to State, to worker, to Employer-360.142€. Program Cost effective, producing average annual saving per patient of 259€ and average reduction of sick leave days of 41,2. Program cost efficiencies produced. Every day of disability saved equivalent to implementation cost of 5,06€. Cost-benefit program produced for State saving of 6,44€ for every € invested in implementation 137.248€. Program had 93,8% patient acceptance expressing maximum satisfaction.

Conclusions: Management of disability by rheumatologist highly profitable given low program implementation cost compared to savings generated for State and Employer.

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Disclosure of Interest: None declared

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THURSDAY, 14 JUNE 2018

Epidemiology, risk factors for disease or disease progression

THU0671 STANDARDISED MORTALITY RATES FOR SYSTEMIC LUPUS ERYTHEMATOSUS IN WESTERN AUSTRALIA FROM 1980 TO 2015

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Background: Patients with Systemic Lupus Erythematosus (SLE) are at increased risk of premature mortality. However, population-level mortality rates for SLE have not yet been reported in Australia.

Objectives: Calculate the standardised mortality rates (SMR) for SLE patients in Western Australia (WA) from 1980 to 2015, overall and by age and gender.

Methods: Utilising whole-population linked hospital admission, cancer registration and death data for WA from 1980 to 2015, we compared characteristics and calculated SMRs (95% CI) for patients with SLE (ICD-9-CM 695.4, 710.0, ICD-10-AM L93.0, M32.0) against controls (5:1) free of rheumatic disease after matching for age, gender, Aboriginality and year of first SLE event.

Results: SLE patients (n=2,868) and controls (n=12,785) recorded 1335 and 4400 deaths with crude mortality rates of 56.3/1,000 vs 37.1/1,000 person-years, respectively. SLE patients were approximately 10 years younger (71 vs 81 years) and 2.2-times more likely hospitalised at death (p<0.001). The age-adjusted SMR (per 1,000) for SLE patients was 4.4 (95%CI 3.0, 5.8), and higher in females 5.4 (95%CI 3.5, 7.4) than in males 3.4 (95%CI 1.5, 5.4). Five-year period SMRs were 8.6 (95%CI 5.0, 12.2) between 1990–1994, 9.3 (95%CI 4.4, 14.2) between 1995–1999, 7.6 (95%CI 3.1, 12.1) between 2000–2004, 4.5 (95%CI 0.2, 8.7) between 2005–2009, and 4.9 (95%CI 1.32, 8.5) between 2010–2015.

Conclusions: SLE patients in WA experienced a decline in SMRs over time, but remain at increased risk of premature mortality. Within the limitations of administrative linked data, SLE in WA associates with an average reduction in life span of 10 years.

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THU0672 IMPACT OF PREGNANCY ON PHYSICAL FUNCTION AND HEALTH-RELATED QUALITY OF LIFE IN WOMEN WITH AXIAL SPONDYLOARTHRITIS

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Background: The only previous study exploring the impact of pregnancy on health-related quality of life in women with axial spondyloarthritis (axSpA), included only ten women.¹

Objectives: To prospectively study physical function and health-related quality of life in a large cohort of women with axSpA during and after pregnancy, using Bath Ankylosing Spondylitis Functional Index (BASFI) and three of the dimensions of RAND 36-Item Health Survey (RAND-36): Physical functioning, bodily pain and mental health.

Methods: RevNatus is a Norwegian nationwide register designed for the follow-up of pregnant women with rheumatic diseases. Our study comprised 179 pregnancies in 166 women with axSpA included in RevNatus between 2006 - 2016. The women had seven visits at a rheumatology unit; before pregnancy, in each trimester, and six weeks, six months and twelve months postpartum. BASFI-scores and scores of RAND-36 physical functioning, bodily pain and mental health from each visit were analysed in a linear mixed model. BASFI has an overall index score between 0 ("no functional impairment") and 10 ("maximal functional