Results: TAA utilization rate increased significant from 1998 to 2010: 0.13 to 0.84 per 100,000 overall, 0.14 to 0.88 per 100,000 in females and from 0.11 to 0.81 per 100,000 in males ($p<0.0001$ for each comparison for time-trends). Compared to the 1998-2000, those undergoing TAA in 2009-10: were older (41% fewer patients <50 years, $p<0.0001$); less likely to have RA as the underlying diagnosis (55% fewer patients, p=0.0001); more likely to have Deyo-Charlson index of two or more (197% more, p=0.0010); and had a shorter length of stay at 2.5 days (17% reduction, $p<0.0001$). Mortality was rare, ranging 0 to 0.6% and discharge to inpatient facility ranged 12.6-14.1%; we noted no significant time-trends in either ($p>0.05$).
Conclusions: The utilization rate of TAA increased rapidly in the U.S. from 1998 to 2010, but post-arthroplasty mortality rate was stable. Underlying diagnosis and medical comorbidity changed over time and both can impact outcomes after TAA. Further studies should examine how the outcomes and complications of TAA have evolved over time.
Disclosure of Interest: J. Singh Grant/research support from: takeda, savient, Consultant for: Takeda, Savient, Allergan, Regeneron, R. Ramachandran: None declared
DOI: 10.1136/annrheumdis-2015-eular.1801

THU0347 ESTIMATING THE COST OF ILLNESS OF GIANT CELL ARTERITIS

J.B. Babigumira[1], M. Li[2], D.M. Boudreau[2], J.H. Best[3], L.P. Garrison[2]. *[1]Global Health; [2]Pharmacy, University of Washington, Seattle; [3]Genentech Inc, San Francisco, United States*

Background: Giant cell arteritis (GCA), a chronic vasculitis commonly presenting with headache due to involvement of the temporal arteries, affects approximately 230,000 individuals in the United States (US). However, limited data exist on the health care resource utilization and costs that are attributable to GCA.
Objectives: The objective of this study was to estimate the cost of illness in patients with GCA in the US.
Methods: A retrospective cohort of patients with incident GCA and five matched controls was identified from a large US claims database between January 1st 2008 and December 31st 2011. GCA patient status was defined by a diagnosis of GCA (ICD-9 446.5), no GCA diagnosis in the 12-months prior, and age greater or equal to 50 years at the time of diagnosis. To create the control group of matched patients without GCA, patients without GCA were randomly assigned an index event month within a calendar year. GCA patients and controls were matched on age, gender, U.S. region, index year of diagnosis, and index month of diagnosis. Only individuals continuously enrolled for 12 months before and 12 months after the index GCA diagnosis (for GCA patients) or the randomly-assigned index date (for controls) were included. One-year costs of healthcare (pharmacy, outpatient, inpatient, and total) among GCA patients and controls were compared, adjusting for age, gender, Charlson Comorbidity Index (CCI), Chronic Condition Count (CCC), U.S. region, and health plan type (HMO vs. other) using generalized linear models. A log link and gamma family was used to model costs, and recycled prediction to calculate cost differences.
Results: A cohort of 11,245 GCA patients and 56,230 controls was identified. The mean age of the cohort was 70 years and 71% were females. Mean CCI was 1.6 for GCA patients and 0.8 for controls. Mean CCC was 11.0 for GCA patients and 4.9 for controls. When compared to control patients, GCA patients had higher mean one-year unadjusted pharmacy costs ($3,200, SD $5,700 vs. $2,860, SD $5,300), outpatient costs ($15,000; SD 28,600 vs. $5,860, SD 20,900), inpatient costs ($8,100, SD $29,800 vs. $2,830, SD $14,800), and total costs ($26,400, SD $48,500 vs. $11,500, SD $29,200). After multivariate adjustment, mean one-year cost for GCA patients were lower for pharmacy costs ($-815, 95% CI: $-990–$-640) but higher for outpatient costs ($3,780; 95% CI: $3,350–$4,200) and inpatient costs ($1,500; 95% CI: $1,150–$4,200). Mean adjusted one-year total costs were also higher for GCA patients compared to controls ($4,800; 95% CI: $4,090–$5,520).
Conclusions: Patients with GCA experience increased healthcare costs compared to patients without GCA after adjusting for covariates related to health care utilization and costs. Our results are the first to inform researchers, clinicians, and policymakers on the cost burden of GCA, estimated to be approximately $1 billion annually in the US. The results may provide guidance for future research and resource allocation decisions.
References:
[1] Lawrence, R.C., et al., Estimates of the prevalence of arthritis and other rheumatic conditions in the United States. Part II. Arthritis Rheum, 2008. 58(1): p. 26-35.
Acknowledgements: The study was funded through an unrestricted research grant to the University of Washington from Genentech Inc.
Disclosure of Interest: J. Babigumira Grant/research support from: Genentech Inc, M. Li Grant/research support from: Genentech Inc, D. Boudreau Grant/research support from: Genentech Inc, J. Best Employee of: Genentech Inc, L. Garrison Grant/research support from: Genentech Inc
DOI: 10.1136/annrheumdis-2015-eular.5013

THU0348 THE INFLUENCE OF DRUG EXPOSURES AND COMORBIDITY ON SURVIVAL IN PATIENTS WITH RHEUMATOID ARTHRITIS

J. Widdifield[1], M. Abrahamowicz[1], M. Paterson[2], C. Bombardier[3], G. Tomlinson[3], A. Huang[2], B. Kuriya[4], S. Bernatsky[1] on behalf of the CAnadian Network for Advanced Interdisciplinary Methods (CAN-AIM) for comparative effectiveness research. *[1]McGill University, Montreal; [2]Institute for Clinical Evaluative Sciences; [3]University of Toronto; [4]Mount Sinai Hospital, Toronto, Canada*

Background: Patients with rheumatoid arthritis (RA) have an increased mortality compared with the general population.[1] Established risk factors for premature mortality include active inflammation/disease activity, comorbidity and extra-articular disease manifestations. Thus, early and greater exposure to disease-modifying anti-rheumatic drugs (DMARDs) may mitigate these risk factors and improve survival in RA.
Objectives: Our aim was to evaluate the associations between RA drug exposures and survival in seniors with incident RA.
Methods: This retrospective cohort study investigated all incident cases of RA diagnosed from 2000 to 2013. We studied a subset of patients within the Ontario RA Database (ORAD) - a validated population-based cohort of all Ontarians with RA - who were aged 66 years and older who have comprehensive public drug insurance. We used Cox proportional hazards regression to investigate mortality, defined as death from any cause, exploring time-dependent cumulative drug exposures during the entire duration of follow-up, while adjusting for baseline age, sex, urban vs. rural residence, socioeconomic status, pre-existing comorbidities (e.g. hypertension, COPD, diabetes, coronary artery disease, cancer), past drug exposures, time-dependent number of physician visits, and extra-articular manifestations of RA (as proxies for RA severity). Adjusted hazard ratios (HRs) and 95% confidence intervals (CIs) were estimated.
Results: Among 25,416 senior RA patients, 67.8% were female, the mean (SD) age was 75.2 (6.5) years, and 85.4% lived in urban areas. During median and maximum follow-up times of 4.4 and 13.2 years, respectively, 7,956 patients died (31.3%) for a mortality rate of 6.2 per 100 person-years. In multivariable analyses, we observed no association between greater cumulative exposure to methotrexate, other DMARDs, or anti-TNF agents and survival. Greater exposure to corticosteroids was associated with greater risk of mortality [HR 1.15 (95% CI 1.14-1.17)], as were greater baseline comorbidity [Charlson HR 1.36 (95% CI 1.34-1.38)] and extra articular disease [HR 1.53 (95% CI 1.47, 1.61)]. Females and residents living in urban areas had lower mortality risk [HR 0.78 (95% CI 0.75-0.82) and HR 0.92 (95% CI 0.86-0.98), respectively].
Conclusions: Though we could not demonstrate an association between exposure to DMARDs and over-all survival in seniors with RA, cause-specific mortality warrants further investigation. Greater exposure to corticosteroids, comorbidity and extra articular RA was associated with pre-mature mortality in our sample.
References:
[1] Widdifield et al, Trends in Excess Mortality among Patients with Rheumatoid Arthritis in Ontario, Canada. Arthritis Care & Research 2015 [in press].
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2015-eular.5089

THU0349 ANALYSIS OF REAL COSTS OF BIOLOGIC THERAPY FOR THE TREATMENT OF CHRONIC INFLAMMATORY ARTHROPATIES IN A TERTIARY UNIVERSITY HOSPITAL. A PILOT STUDY

J.M. Pego-Reigosa[1,2], M. Ucha[2], F. Maceiras[2], R. Melero[2], M. Álvarez[2], C. Mouriño[2], A. Martín[2], M. Rodríguez[2], M. Rodríguez[2], V. Balboa[3], J. Uña[3], I. Hernández[2], C. Barbazán[2], G. Piñeiro[2], N. Martínez[2]. *[1]IBI-IRIDIS Group; [2]H; [3]U, Vigo, Spain*

Background: Daily clinical practice not always corresponds with the standard use of biologic therapies (BT) in rheumatic patients.st
Objectives: To determine the real vs. theoretical annual cost of BT per patient with chronic arthritis at a University tertiary Hospital.
Methods: Descriptive, observational, retrospective and cross-sectional study. Information over a 5-year period (2009-2014) is collected.
Inclusion criteria: a) adult patients with RA (ACR), AE (New York modified/ASAS) or PsA (CASPAR) attended at the Rheumatology Service of the University Hospital of Vigo and b) >6 months of treatment with BT.
Variables: a)demographics, b)clinical, c)pharmacotherapeutic history and d)per each BT: number of dispensations, adverse events, therapeutic failures, transitory or definitive discontinuation, survival of each BT line, real and theoretical (price to retailer) annual cost/patient of each BT line. Variables are described per disease and BT.
Results: 484 patients were studied (total: 755 BT lines). Mean age (years): 53.8±14.8; females: 263 (54.3%). The diseases treated were RA 226 (46.8%), AE 107 (22.2%), PsA 117 (24.2%) and other spondyloartrhopaties 33 (6.8%). Mean disease duration (years): 13.1±8.2.
Mean global BT duration (months) from the beginning of the evaluation (January 2009) was: 40.9±58.9. The table shows the different BT lines used and their mean duration (months) from that date. There were 359 (47.4%) definitive withdrawals of BT, being secondary failure 156 (43.4%) and adverse events 82 (22.8%) the most