

survey was related to biology. Most of the patients were treated with NSA as an initial intent. A corticoids-based therapy was proposed to 1.4% of the patients and the corresponding specialist was a rheumatologist (98%).

Conclusions: The *de novo* arthritis prevalence for GPs is less than 5% with the knee being the most affected joint. Most frequently, GP are faced with gout, rheumatoid arthritis and spondyloarthritis. The handling is in line with the corresponding guide of good clinical practice.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.2521

AB1109 DOSE DE-ESCALATION IN A SPECIALIZED OUTPATIENT CLINIC ON BIOLOGICAL THERAPY: COST MINIMIZATION OBSERVATIONAL STUDY

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Objectives: To estimate the annual cost in the use of biological therapy (BT) in patients with different rheumatic diseases when dose modifications are undertaken in daily clinical practice in a specialized outpatient clinic during 2016 and to compare the results with data obtained in 2013.

Methods: *Design:* Cost minimization observational study under conditions of clinical practice. *Patients:* Patients with different rheumatic diseases who come to a specialized outpatient clinic on BT in the Rheumatologic department at a tertiary Spanish hospital (with a tight follow-up) that had been treated with BT under reduced doses during 2016 were collected. *Protocol:* Reductions in treatment dose or dose frequency were established empirically and were carried out by their rheumatologist in those patients who were in remission (DAS 28 <2,6) for at least 6 months without steroids. *Main outcome:* Reduction of annual average cost in euros in BT used in patients who are in dose reduction in clinical practice in 2016. *Secondary outcome:* Differences in annual costs reduction in 2016 compared with 2013. The cost reduction was calculated by comparing the actual expenditure (after modifying treatment dose in clinical practice) with the theoretical costs (official price) in case you had not made the adjustment. *Statistical analysis:* Sample descriptive analysis. Reducing annual absolute costs and by treatment after tapering down doses in clinical practice in 2016 and the differences found between 2013 were calculated.

Results: During 2016, the dose of the BT of 168 patients (94 Subcutaneous BT and 74 intravenous BT) were modified in clinical practice after reaching clinical remission: mean of DAS 28 (mean±SD)=2.31±0.76 or BASDAI (mean±SD)=2.15±1.39 without radiographic progression. Most patients were women (n=113;67%) and had rheumatoid arthritis (n=103;62%) and the rest were distributed among: spondyloarthritis (n=28;17%), psoriatic arthritis (n=22;13%), juvenile idiopathic arthritis (n=10;5%) and Systemic Lupus Erythematosus (n=5;3%). No patients treated with certolizumab or anakinra was modified treatment doses. During this period, 5 patients discontinued BT (3 remissions and 2 minor adverse events). Table 1 shows the number of patients by type of BT and costs. The BT dose reduction in clinical practice during 2016 represented a saving of 676,501.67€ and a greater efficiency of treatments while in 2013, only 86 patients (30 etanercept, 15 adalimumab, 16 Infliximab (Remicade), 15 Tocilizumab IV and 55 Rituximab) had a modified dose of BT in clinical practice assuming a saving of 396,995.46€. The difference in the annual cost reductions in 2016 compared to 2013 meant a saving of 279.506,21€ more in the last year. Table 1.

Biological Therapy	Patients with reduced doses	Theoretical Annual costs (Label doses)	Real Annual Costs (Clinical practice doses)	Annual costs reduction 2016
Etanercept	53	582,453.04	317,649.69	264,803.35
Adalimumab	28	343,186.48	217,922.02	125,264.46
Golimumab	3	32,297.46	28,898.76	3,398.70
Tocilizumab sc	9	109,755.36	79,137.42	30,617.94
Tocilizumab iv	15	179,821.23	136,803.11	43,018.12
Abatacept	1	16,512.42	17,410.64	898.22
Infliximab (Remicade)	15	164,589.70	119,720.52	44,869.18
Rituximab	44	286,410.96	122,779.26	163,631.7
Total	168	1,715,026.65	1,040,321.42	676,501.67

Conclusions: In rheumatic diseases we may do a dose de-escalation of BT in patients who go into remission and therefore we could reduce the associated costs of BT and being more efficient with the treatments. We believe that it is important to create specialized outpatient clinics on BT where a tight-control management of these patients and an individualized treatment are carried out.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6220

AB1110 WHAT CAN GOOGLE TRENDS CAN TELL US ABOUT A DISEASE? BIG DATA TRENDS ANALYSIS IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: "Infodemiology" and "infoveillance" are two recent terms created to describe a new developing approach for public health, based on Big Data monitoring and data mining, applicable to provide new insights into unmet needs, such as the epidemiology of an uncommon disease like Systemic Lupus Erythematosus (SLE)[1].

Analysing how people (including patients, researchers, physicians) search and navigate the Internet for health-related information, as well as how they communicate and share this information, can provide valuable insights into health-related behaviour of populations.

Objectives: In this study we aimed to investigate trends of Internet search volumes linked to SLE, on-going clinical trials and research developments associated to the disease, using Big Data monitoring and data mining. We also aimed to analyse peak-related information to investigate knowledge translation of novel therapies for SLE and the influence of media on health-related information seeking.

Methods: We performed a longitudinal analysis based on the large amount of data generated by Google Trends, scientific search tools (SCOPUS, Medline/Pubmed/ClinicalTrials.gov) considering "SLE", and "lupus" in a 5-year web-based research.

Results: We observed an overall higher distribution of search volumes from Google Trends in United States, South America, Canada, South Africa, Australia and Europe (mainly Italy, United Kingdom, Spain, France, Germany), showing a geographically heterogeneity in insight into health-related behaviour of the different populations towards SLE. Data from Medline/Pubmed, SCOPUS and ClinicalTrials.gov were also analysed in order to monitor public health relevant publications and on-going trials. When comparing these results to the distribution of search volumes of Google Trends, we observed an overall similar distribution of Big Data for United States and Europe, while South America, Canada, Australia and South Africa were less represented. We observed a misbalance between search volumes for Google Trends compared to Medline/Pubmed, SCOPUS and ClinicalTrials.gov in some areas, suggesting a recent and expanding interest on SLE-related health issues in some countries.

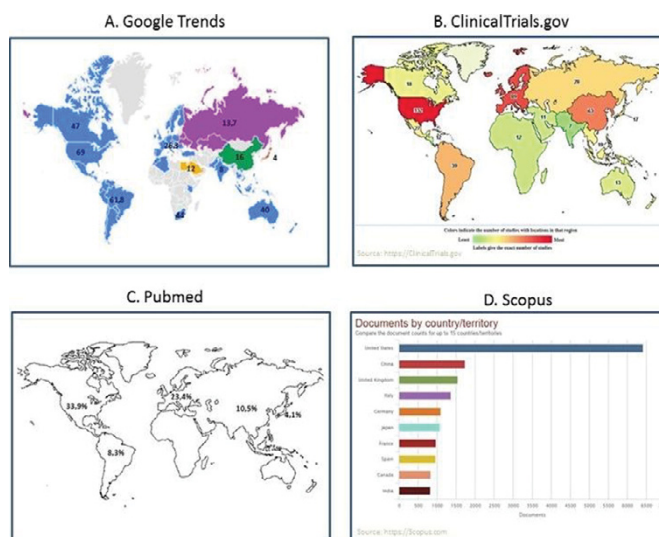


Figure 1: profile plots for relative search volumes. Profile plots show the relative search volumes, from January 2011 to January 2016, for 'Systemic Lupus Erythematosus' using Google Trends (Panel A), ClinicalTrials.gov (Panel B), PubMed (Panel C) and Scopus (Panel D). Date of search 16th October 2016.

Conclusions: We observed in some countries a misbalance between the search volumes generated by Google Trends and those analyzed through scientific search tools. This new approach, merging together informatics and epidemiology, is able to investigate health information seeking. In the near future it might give an estimate of the health-related demand and even of the health-related behaviour of patients with SLE.

References:

- [1] Eysenbach G. Infodemiology and infoveillance: framework for an emerging set of public health informatics methods to analyze search, communication and publication behavior on the Internet. *J Med Internet Res* 2009;11:e11. doi:10.2196/jmir.1157.