ICD-9-CM or exemption code. A cross-sectional analysis was performed for years 2016-2018 to evaluate treatment patterns. Patients prescribed drugs indicated for axSpA were defined "treated", otherwise "untreated". A longitudinal analysis was conducted to investigate biological disease-modifying antirheumatic drugs (bDMARDs) utilization among axSpA patients receiving their first bDMARD (index-therapy) during years 2014 and 2017. Follow-up was from index-therapy prescription date to end of data availability. Switch was defined when bDMARDs administered during follow-up were different than index-therapy. Treatment discontinuation was defined as absence of bDMARDs prescriptions during last trimester of follow-up. ***Results:*** In the sample analysed, AxSpA prevalence was 0.076% (0.088% in adult population). Cross-sectional analysis: patients with axSpA diagnosis were 5,942 in 2016, 6,554 in 2017, 7,146 in 2018. Proportion of untreated patients was 34.1% (2016), 36.6% (2017) and 51.5% (2018), that of bDMARDs-treated patients was 21.4% (2016), 22.0% (2017), 16.9% (2018). In 2016 the only class of biologic prescribed was anti-TNF; in 2017 bDMARDs-treated patients started receiving anti-IL-17A agents (7.9% in 2017, 12.9% in 2018). Longitudinal analysis: in 2014, of 349 patients included, 9.5% switched therapy; 13.8% discontinued their bDMARDs treatment after a mean time of 84.9±72.7 days. In 2017, 262 patients were considered: 12.2% switched therapy and 27.1% had a treatment discontinuation after a mean time of 107.0±81.9 days. ***Conclusions:*** In this real-world study, we provided axSpA prevalence in an unselected Italian population under clinical practice settings. Preliminary results showed significant proportions of untreated patients. In 2017, around one-fourth of patients receiving first bDMARD discontinued their treatment. Our findings suggest an unmet therapeutic need exists for axSpA patients.

Musculoskeletal Disorders - Health Technology Assessment

PMS37
HEALTH-ECONOMIC ANALYSIS OF TOCILIZUMAB IN PATIENTS WITH RHEUMATOID ARTHRITIS AND SYSTEMIC JUVENILE ARTHRITIS

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Objectives: Rheumatoid arthritis (RA) and systemic juvenile arthritis (sJA) are the most frequent rheumatic diseases in adults and adolescents, consequently. Biologics disease modifying antirheumatic drugs (bDMARDs) are effective in treatment of RA and sJA. ***Methods:*** The aim of the study was to perform health-economic analysis of tocilizumab for subcutaneous and intravenous injections in patients with RA and sJA comparing to TNF-α inhibitors. Latest meta-analyses do not show significant differences between bDMARDs in the effectiveness in treatment RA and sJA. Cost-minimizing analysis was used from the perspective of healthcare system (direct medical costs) with the modelling horizon – 1 year. We included into the model cost of RA and sJA bDMARDs, cost of adverse events correction (including reactivation of tuberculosis) and costs of laboratory and instrumental diagnostics. Sensitivity analysis was done to assess how the changes in model parameters influence the results. ***Results:*** Cost minimizing ratio of tocilizumab (subcutaneous form) in RA patients comparing to adalimumab (Humira), certolizumab pegol, golimumab were 111536 RUR; 129094 RUR; 85244 RUR, consequently favor to tocilizumab. Tocilizumab was less costly comparing to adalimumab (Humira), certolizumab pegol, golimumab by 12.8%, 14.5%, 10,0%, consequently. Cost minimizing ratio of tocilizumab in RA patients comparing to adalimumab (Dalibra), etanercept, infliximab (Remicade) were 40497; 54355; 28419 RUR in favour to comparators. Tocilizumab was more costly comparing to adalimumab (Dalibra) etanercept, infliximab (Remicade) by 5.6%, 7.7%, 3.9 %, consequently. Cost minimizing ratio of tocilizumab in sJA patients comparing to kanakinumab, adalimumab (Humira) and adalimumab (Dalibra) were 6535234 RUR; 478297 RUR and 323263 RUR. Tocilizumab was less costly comparing to kanakinumab, adalimumab (Humira) and adalimumab (Dalibra) by 93.3%; 50.6% and 41.1 %, consequently. The share of bDMARDs in total costs structure was 84%-96%. ***Conclusions:*** Tocilizumab is economically reasonable comparing to others TNF-α inhibitors in patients with RA and sJA.

PMS38
TOFACITINIB FOR THE TREATMENT OF ADULT PATIENTS WITH MODERATE TO SEVERE ACTIVE PSORIATIC ARTHRITIS INTOLERANT OR WITH THERAPEUTIC FAILURE TO SYNTHETIC OR BIOLOGICAL DISEASE-MODIFYING DRUGS

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Objectives: The aim of this study was to evaluate the efficacy and safety of tofacitinib for the treatment of moderate to severe active psoriasis arthritis in adult patients who don't responded or are intolerant to previous treatment with synthetic or biological disease-modifying drugs. ***Methods:*** A structured search was carried out in the Medline, Embase and Cochrane Review databases. The primary endpoint was American College of Rheumatology Response Criteria - ACR50, chosen because it is the most clinically relevant outcome. Study quality was assessed by Cochrane risk of bias tool - Rob 2. A cost-minimization analysis was performed, since studies of indirect comparison of tofacitinib with its comparators demonstrated similar effectiveness, and budget impact analysis. ***Results:*** Two phase III studies were selected: in the study with patients previously treated with anti-TNF, ACR50 in 3 months was 15% for placebo, 30% for 5mg tofacitinib (p = 0.003), and 28% for 10mg tofacitinib (p = 0.007); in the study of patients previously treated with synthetic disease-modifying drugs in 3 months the response rates were 10% for placebo, 28% for tofacitinib 5mg and 40% for tofacitinib 10 mg (p <0.001 for both comparisons). Cost-minimization analysis: generated a cost saving that ranged from -USD 250.86 (in relation to Adalimumab) to -USD 2,803.86 (in relation to Imfliximabe). Budget impact: cost saving in one year was –USD 7,8 million, varying in the scenarios between –USD 1.7 million to –USD 12,03 million and in five years it was –USD 45,15 million varying in the scenarios between –USD 9,85 million to –US $ 69,83 million. ***Conclusions:*** The few scientific evidence available, possibly due to the recent registration of this new indication with regulatory agencies, demonstrated that the drug has similar efficacy to biological disease-modifying drugs at a lower cost.

PMS39
COMPARATIVE EFFICACY OF SYNTHETIC AND BIOLOGIC DMARDS FOR ADULT PATIENTS WITH ACTIVE PSORIATIC ARTHRITIS IN THE RUSSIAN FEDERATION: A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS

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Background: Psoriatic arthritis (PsA) is a chronic immune-mediated inflammatory disease often developing in patients with cutaneous psoriasis. Disease-modifying antirheumatic drugs (DMARDs) can slow the progression of PsA and save the joints from permanent damage. Many synthetic and biologic DMARDs are approved for the treatment of PsA in Russia, however, only few studies directly compare their clinical efficacy. Therefore, network meta-analysis (NMA) can inform evidence-based decision-making. ***Objectives:*** To compare the efficacy of synthetic DMARDs (sDMARDs) and biologic DMARDs (bDMARDs) approved in Russia for active PsA. ***Methods:*** Phase II and III randomised controlled trials (RCTs) evaluating efficacy of sDMARDS (tofacitinib, apremilast) and bDMARDS (netakimab, guselkumab, ustekinumab, secukinumab, ixekizumab, adalimumab, etanercept, infliximab, certolizumab, golimumab) for active PsA were identified by systematic literature review performed in Pubmed and Embase databases. The risk of bias assessment of eligible RCTs and the assessment of possible sources of heterogeneity were conducted. Bayesian random effects NMAs were performed to estimate pooled risk ratios (RR) and 95% credible intervals (CIs) to compare and rank these treatments according to American College of Rheumatology criteria (ACR), ACR20, and 75% improvement in psoriasis area and severity index (PASI75) at weeks 16 and 24. Subgroup analyses included biologic-naïve population. ***Results:*** Overall, 29 RCTs, including 10,894 participants, were selected for further synthesis. Netakimab demonstrated significantly higher efficacy (ACR20) than other DMARDs at week 24, and at week 16 - along with infliximab and etanercept. No significant differences were established in PASI75. In the overall population and biologic-naïve subgroup netakimab was ranked the highest for the ACR20 response rate both at weeks 16 and 24 analyses. Netakimab is also the most effective drug according to PASI75 in all NMAs conducted, except analysis at week 24 in the overall population where adalimumab dominates the ranking. ***Conclusions:*** Netakimab is one of the most effective treatments for active PsA.

Musculoskeletal Disorders - Medical Technologies

PMS40
STARTING TREATMENT WITH BARICITINIB: CHARACTERISTICS OF PATIENTS AND STATUS AT FIRST FOLLOW-UP IN THE BSRBR-RA REGISTRY

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Objectives: Baricitinib is a JAK-inhibitor approved for the treatment of moderate to severe active rheumatoid arthritis (RA). The British Society for Rheumatology Biologics Registry – Rheumatoid Arthritis (BSRBR-RA) captures real-world data on biologic and novel therapies, including baricitinib, in the UK. Patients are followed up six-monthly for the first three years and annually thereafter. Objectives of this study were to describe baseline characteristics and status (continuation with baricitinib and disease activity) at first follow-up for those initiating baricitinib. ***Methods:*** The