Direct med. costs/€ (excl. medication)	1,618	381	- 1,237	1,823	692	- 1,131
Comedication/€	498	417	- 81	417	414	- 3
Biologicals/€	0	19,082	+ 19,082	21,673	19,082	- 2,591
Medication/€	498	19,498	+ 19,000	22,091	19,496	- 2,595
Absenteeism/€	2,991	892	- 2,099	3,028	464	- 2,564
Total/€	5,107	20,771	+ 15,664	26,942	20,653	- 6,289

Table 1. Costs per patient and year (Subgroup patients with RA)

Conclusion: Costs of healthcare utilization, as well as work disability decreased after starting GLM within an observation period of 24 months, for pts. with RA, PsA, and AS, respectively. Due to the high costs of TNFi therapy, drug costs in the group of biologic-naïve pts. rose markedly. Savings were generated in the group of pts. pre-treated with biologics.

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THU0654

INFLUENCE OF THE NEW PHARMACOLOGICAL AND NON-PHARMACOLOGICAL APPROACHES IN RHEUMATOID ARTHRITIS ON WORK PARTICIPATION: A SYSTEMATIC LITERATURE REVIEW

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Background: Rheumatoid arthritis (RA) is a chronic and progressive autoimmune disease that frequently has a negative impact on work participation among patients. Even more, patients with RA are at greater risk to become work disabled, have a reduced work productivity (presenteeism) or increased sick leave (absenteeism) compared to the general population. This outcome can be related to the World Health Organization International Classification of Functioning, Disability and Health (the WHO ICF framework), that is useful in understanding the impact of RA regarding functioning. Since 2000, the management of RA has made significant progress. With the establishment of the new ACR/EULAR criteria and the treat-to-target (T2T) strategies, patients are nowadays diagnosed and treated earlier. Furthermore, the improvement of the management of RA has led to much better results regarding disease activity and joint destruction. However, many of these patients are confronted with additional fees when contracting private insurances, since the risk assessment by insurances is mainly based on historical data.

Objectives: This systematic literature review was performed to study the influence of new pharmacological and non-pharmacological approaches on work participation among patients with RA with the objective to improve the risk assessment of RA patients when contracting private insurances.

Methods: A systematic literature review from January 1990 until January 2018 was performed using Pubmed, Embase and Web of Science. Different search terms were used in each database: employment, workplace, sick leave, absenteeism, work capacity and international classification of functioning, disability and health. All studies assessing one of the search terms were analysed.

Results: Finally, 49 relevant articles were selected. The selected studies were subdivided according to study design (RCT versus cohort study) and disease duration of the studied patients. Studies that examined the value of an adequate early intervention were grouped separately. Overall, studies on the impact of the non-pharmacological approach were limited and very heterogeneous. Positive results of pharmacological agents (combination of DMARDs or biologic therapy) on work participation could be demonstrated in patients with recent-onset RA. Long-term observational studies showed an association between initiation of new therapeutic

strategies and a reduction in work disability among patients with RA. However a causal relation was difficult to confirm because of the study design. Moreover, some studies pointed out other contextual factors that also influence work disability such as political policy, demographic changes in age distribution or educational level.

Conclusion: The large heterogeneity in terms of patient population, study design and outcome measures limits interpretation of the data. However, this systematic literature review could demonstrate that the effect of a treatment is of utmost importance and not the treatment itself. This emphasizes also the importance of early intervention with pharmacological agents regarding work productivity outcomes in RA. In addition, the impact of personal and environmental factors on work participation may not be neglected.

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Epidemiology, risk factors for disease or disease progression

THU0655

LONG-TERM OUTCOME OF JUVENILE IDIOPATHIC ARTHRITIS: COMPARISON OF BIOLOGIC AND METHOTREXATE ERAS

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Background: After nearly two decades from the start of the Biologic era, systematic analyses of patient with juvenile idiopathic arthritis (JIA) have shown a high frequency of attainment of inactive disease (ID) and satisfactory levels of physical function and quality of life. However, whether and to what extent the disease prognosis has improved in comparison with the methotrexate (MTX) era is still uncertain.

Objectives: To compare the long-term disease state, in terms of activity and damage, of children with JIA who had their disease onset in MTX or Biologic eras.

Methods: Patients were included in MTX or Biologic era cohort depending on whether their disease presentation occurred before or after January 2000. Patients in the MTX era cohort and part of the patients in the Biologic era cohort were taken from a previous cross-sectional study published by our group,¹ which enrolled 310 patients with disease onset between December 1986 and December 2002. An additional sample of patients with onset in the Biologic era was enrolled in a subsequent prospective cross-sectional study, which included all consecutive patients meeting the ILAR criteria for JIA, who were seen consecutively at the Istituto Gaslini of Genoa, Italy, between January 2015 and June 2017. All patients had disease duration ≥ 5 years and underwent a prospective cross-sectional assessment, which included measurement of disease activity and damage. ID and low disease activity (LDA) states were defined according to Wallace, JADAS10 and cJADAS10 criteria. Articular and extra-articular damage was assessed with the Juvenile Arthritis Damage Index (JADI).

Results: MTX and Biologic era cohorts included 239 and 269 patients, respectively. Patients were divided in the "functional phenotypes" of oligoarthritis and polyarthritis. At cross-sectional visit, patients in the Biologic era cohort with either oligoarthritis or polyarthritis had consistently higher frequencies of ID and LDA than patients in the MTX era cohort. The measurement of disease damage at cross-sectional visit revealed that the frequency of impairment of > 1 JADI-Articular items was higher in MTX than in Biologic era cohort (17.6% versus 11% in oligoarthritis and 52.6% versus 21.8% in polyarthritis). Likewise, frequency of involvement of > 1 JADI-Extraarticular item was higher in MTX than in Biologic era cohort (26.5% versus 16.2% in oligoarthritis and 31.4% versus 13.5% in polyarthritis). The sole JADI items that were detected in more than 5% of patients in the Biologic era cohort were temporomandibular damage in oligoarthritis and polyarthritis, ankle damage in polyarthritis and leg-length inequality in oligoarthritis. The analysis of the temporal trend of damage development over the 25 years of our analysis (1986-2011) highlighted