





# RHEUMATOID ARTHRITIS AND MALIGNANCY: A SYSTEMATIC REVIEW

TANIA MARIA MARTENSEN GALVAO (IPEMED, SAO PAULO, SP, Brasil), THIAGO FERREIRA SILVA (IPEMED, SAO PAULO, SP, Brasil)

## BACKGROUND

Rheumatoid arthritis (RA) is a chronic, inflammatory, autoimmune, prevalent disease that mainly affects joints with variable clinical presentation, with potential for irreversible disability if insufficiently treated. It is well known that the malignancy is one of the main comorbidities in RA, in special hematologic disorders, and could be related with both the activity and treatment of the disease. The tumor necrosis factor alpha (TNF- $\alpha$ ) as known has a significant role in the monitoring against the appearance of neoplasias, thus your inhibition has always been seen as a possible risk factor of development malignancies. Considering the growing use of biological therapies, the increased risk of cancer becomes a concern. Therefore, this theme has been of ongoing interest and research.

## MATERIALS AND METHODS

A search was conducted of scientific articles indexed in the Pubmed, Lilacs, Scielo, Portal Capes electronic databases and the journal Nature in the period from 2014 to 2019, using the descriptors "rheumatoid arthritis" correlated with "neoplasm". In total 5.058 articles were found, of which 189 were initially selected. After applying the exclusion criteria: under 16 years in the diagnosis, theme diversions and inequality evidences, 39 articles remained for final analysis.

### RESULTS

Besides significant achievements of the RA treatment, the mortality comparing patients with the general population remains superior in the patients group, reducing life expectancy of about 3–10 years. Among the causes of death, malignancies (14%), loses only for cardiovascular (29%) and infectious (22%) diseases. Patients with RA present an increased risk of malignancy, with lymphoma being more prevalent in a incidence approximately 2-3:1, and the diffuse large B-cell lymphoma (DLBCL) is the histological type more common, constituting one third of all cases of non-Hodgkin's, followed by non-melanoma skin cancer and lungs cancer. In contrast, colorectal and breast cancer appear to be in reduced risk. Among the risk factors, excel: genetic predisposition, males, prevalence of comorbities, tobacco, disease activity and therapeutic compliance.

## CONCLUSION

So far, the drugs of the treatment for RA have shown a relative safety, in comparison to the oncologic effects, being recommended the use of immunobiological agents only 5 years after through the malignancies diagnosis. The control of the RA treatment is essential to reduce the risk of cancer, since the stage of the disease activity is a considerable risk factor to neoplasm disorders. The cancer screening, according to the age and gender specific orientations, are important in the handling of the RA.