Patients with rheumatoid arthritis have an increased risk of certain types of malignancy

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The results of a study presented at the Annual European Congress of Rheumatology (EULAR 2018) examined rates of malignancy in patients with rheumatoid arthritis (RA), excluding non-melanoma skin cancer (NMSC), and found no difference between those newly treated with tocilizumab (TCZ) versus TNF inhibitors (TNFi).

RA is a chronic inflammatory disease that affects a person's joints, causing pain and disability. It can also affect internal organs. RA is more common in older people, but there is also a high prevalence in young adults, adolescents and even children, and it affects women more frequently than men.

Patients with RA have been shown to be at increased risk of developing certain malignancies, thought to be due to the immune dysregulation and/or chronic inflammation in RA. Recently, biologic DMARDs (bDMARDs) have become available and there are some concerns regarding malignancy with their use, given their target-specific inhibition of the immune system. However, there has been conflicting data regarding the influence of bDMARDs on malignancy.

"The risk of malignancy among patients with RA has been of ongoing interest," said Professor Robert Landewé, Chairperson of the Scientific Programme Committee, EULAR. "With more biologic treatment options available and earlier initiation of therapy, it is important to understand the risk of malignancies in patients with RA."

This study examined the rate of incident malignancy, excluding NMSC, in patients with RA who were newly treated with either TCZ or TNFi.

"Our study is one of a few to investigate head-to-head comparisons of malignancy risk between different types of biologics in RA," said Seoyoung C. Kim, MD, ScD, Associate Professor of Medicine, Brigham and Women's Hospital/Harvard Medical School, Boston, USA (study author). "This study found no difference in the risk of malignancy, excluding NMSC, in patients with RA who newly switched to TCZ versus TNFi from a different TNFi, abatacept or tofacitinib."

The study included adult patients with RA who had newly started on TCZ or a TNFi after failing on abatacept, tofacitinib or another TNFi. Investigators used three healthcare claims databases (Medicare, IMS ParMetrics Plus and Truven MarketScan) from 2010-2015 to identify 10,393 TCZ initiators who were propensity score matched (1:3 variable ratio) to 26,357 TNFi initiators. This is a statistical matching technique that controls for over 60 potential baseline confounding variables. Individuals were followed up until treatment discontinuation, outcome occurrence, disenrollment, death or the end of the study period.

The primary outcome was an incidence of malignancy (excluding NMSC) which were identified based on two diagnosis codes within two months. The incidence of malignancy per 100 person-years ranged from 0.83 to 2.32 in TCZ patients, and from 0.96 to 2.15 in TNFi patients between the different databases. Statistical analysis revealed no significant differences between the groups. In addition, there were no significant differences in the incidence of the ten most frequently occurring cancers and leukaemia or human papilloma virus-related cancer which were analysed as individual secondary endpoints.

More information: Désirée van der Heijde et al. Common language description of the term rheumatic and musculoskeletal diseases (RMDs)

for use in communication with the lay public, healthcare providers and other stakeholders endorsed by the European League Against Rheumatism (EULAR) and the American College of Rheumatology (ACR), *Annals of the Rheumatic Diseases* (2018). DOI: 10.1136/annrheumdis-2017-212565