

# Study shows that rheumatoid arthritis is associated with a 23% increased risk of developing diabetes

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A new study presented at this year's annual meeting of the European

Association for the Study of Diabetes (EASD), held online this year, shows that rheumatoid arthritis (RA) is associated with a 23% increased risk of type 2 diabetes (T2D), and may indicate that both diseases are linked to the body's inflammatory response. The research was conducted by Zixing Tian and Dr. Adrian Heald, University of Manchester, UK, and colleagues.

Inflammation has emerged as a key factor in the onset and progression of T2D, and RA is an autoimmune and inflammatory disease. The team suggest that the [systemic inflammation](#) associated with RA might therefore contribute to the risk of an individual developing diabetes in the future.

The team conducted a comprehensive search of a range of medical and scientific databases up to 10 March 2020, for cohort studies comparing the incidence of T2D among people with RA to the diabetes risk within the general population. Statistical analyses were performed to calculate the relative risks, as well as to test for possible publication bias (in which the outcome of research influences the decision whether to publish it or not). The eligible studies identified comprised a total of 1,629,854 participants. Most of the studies were population-based and one was hospital-based, while no evidence was found for [publication bias](#) in any of them.

The authors found that having RA was associated with a 23% higher chance of developing T2D, compared to the diabetes risk within the [general population](#). They conclude that: "This finding supports the notion that inflammatory pathways are involved in the pathogenesis of diabetes."

The researchers also state: "We suggest that more intensive screening and management of diabetes risk factors should be considered in people with rheumatoid arthritis. Agents that reduce systemic inflammatory

marker levels may have a role in preventing type 2 diabetes. This may involve focussing on more than one pathway at a time."

Provided by Diabetologia

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