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SAT0277	THE 100 MOST INFLUENTIAL PUBLICATIONS IN SYSTEMIC SCLEROSIS: A BIBLIOMETRIC STUDY

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Background: In recent years, a large volume of important clinical and scientific papers about systemic sclerosis can be found in the most

influential journals. Bibliometric analysis is a statistical method that enables researchers to analyze citation patterns and highlight characteristics of highly cited scholarly work. It has been infrequently utilized in Rheumatology[1,2]. Prior studies have not addressed the bibliometric literature gap in the field of systemic sclerosis.

Objectives: This study aims to identify the 100 most cited papers in systemic sclerosis and to describe their characteristics.

Methods: We sought to assess the characteristics of the top 100 most referenced citations in systemic sclerosis. We searched the Scopus and Web of Science databases to identify all articles relating to 'Scleroderma', 'limited' or 'diffuse Systemic Sclerosis' and 'CREST syndrome'. Articles were arranged in descending order of citations and were scrutinized by two independent reviewers. Selected articles were analyzed with respect to number of citations, publication year, journal characteristics, research type, focus area, authors and countries of authors of publications.

Results: Retrieved articles were published mostly in rheumatology journals (n=42) with impact factors ranging between 3.47 and 12.35 in these journals, followed by journals in general medicine, pulmonology, and experimental biomedical research. Journals with the highest number of top-cited articles included *Arthritis and Rheumatism* (n=25), followed by the *The New England Journal of Medicine* (n=9) and *Annals of the Rheumatic Diseases* (n=8). Studies conducted in USA, UK, and Italy that were published in high-impact journals had the highest citation count. Temporal analysis indicated that the majority of top-cited articles were published between 1998 and 2014 (n=65). The most productive 5-year time period was between 2000 and 2005 when 23 of the 100 most cited publications were produced. Among retrieved citations, guidelines and recommendations comprised 5% of all articles, narrative reviews 21%, randomized clinical trials 12%, observational studies 35%, non- randomized clinical studies (basic and translational research) 24%, case series 1%, and meta-analyses 2%. Our analysis shows that articles defining the classification criteria of Systemic Sclerosis were among the most cited work followed by those describing the pathophysiology of the disease. Other highly cited areas included cellular and molecular mechanisms of fibrosis (with special emphasis on the role of TGF-β) and Randomized Controlled Trials for Bosentan and Epoprostenol in the treatment of pulmonary hypertension. Regarding individual organ manifestations, Pulmonary and Cardiac complications (pulmonary hypertension, lung disease, myocardial effects) (n=21) were of highest interest, while other articles focusing on Cutaneous (ulcers, skin changes, Raynaud's phenomenon) (n=16), Renal (renal crises) (n=3) and Gastrointestinal complications (dysmotility) (n=1) were cited to a lesser extent. Interestingly, articles primarily describing hematopoietic stem cell transplant as a viable treatment option did not feature on this list.

Conclusion: Our study provides the first bibliometric overview of the most highly cited scientific papers on systemic sclerosis. These findings provide useful insights into trends of published work and may serve as a useful guide to researchers in this field.

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