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SHORT COMMUNICATION

Metric analysis of journals indexed in Scopus from 2019 to 2022 with more than 30 000 cites

Análisis métrico de revistas indexadas en Scopus del 2019 a 2022 con más de 30 000 citaciones

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ABSTRACT

Introduction: Scopus is considered, together with Isis Web of Science, one of the best databases, with a high prestige within this communication field.

Objective: to characterize the 1st quartile journals indexed in Scopus with more than 30 000 citations.

Methods: A metric, descriptive and cross-sectional analysis of the open access journals indexed in Scopus belonging to the Q1 was carried out, from 2019 to 2022. In the Scopus preview search engine (https://www.scopus.com/sources.uri) a search for source was performed. In the display options it was selected: show only open access journals, with a minimum number of 30 000 citations, 1st quartile and as source type: journals.

Results: A total of 24 journals were obtained; of these, the highest CiteScore index corresponds to Molecular Cancer with 64,9, while the highest number of citations corresponds to the International Journal of Environmental Research and Public Health with 241 049 citations; the CiteScore mean is 13,4 ± 10,5 and citations is 71 658,7 ± 40 550,5.

Conclusion: The journals indexed in Scopus belonging to Q1 in the period from 2019 to 2022 have an average CitaScore of 13,4 and citations is 71 658,7 on average; published an average of 8 877,9 for 79,9 citations, with an average SNIP and SJR of 1,825 and 2,386 respectively, with General Medicine being the most prevalent theme and Multidisciplinary Digital Publishing Institute the most represented publisher.

RESUMEN

Introducción: Scopus es considerada, junto con Isis Web of Science, una de las mejores bases de datos, con alto prestigio dentro de este campo de la comunicación.

Objetivo: caracterizar las revistas del 1er cuartil indexadas en Scopus con más de 30 000 citas.

Métodos: Se realizó un análisis métrico, descriptivo y transversal de las revistas de acceso abierto indexadas en Scopus pertenecientes al Q1, del 2019 al 2022. En el buscador de vista previa de Scopus (https://www.scopus.com/sources.uri) se realizó una búsqueda de fuente. En las opciones de visualización se seleccionó: mostrar sólo revistas de acceso abierto, con un número mínimo de 30 000 citas, 1er cuartil y como tipo de fuente: revistas.

Resultados: Se obtuvieron un total de 24 revistas; de estos, el índice CiteScore más alto corresponde a Molecular Cancer con 64,9, mientras que el mayor número de citas corresponde al International Journal of Environmental Research and Public Health con 241.049 citas; la media de CiteScore es 13,4 ± 10,5 y las citas son 71.658,7 ± 40.550,5.

Conclusión: Las revistas indexadas en Scopus pertenecientes al Q1 en el periodo 2019 a 2022 tienen un CitaScore promedio de 13.4 y las citaciones son 71 658.7 en promedio; publicó un promedio de 8.877,9 para 79,9 citas, con un SNIP y SJR promedio de 1.825 y 2.386 respectivamente, siendo el tema de mayor prevalencia la Medicina General y editorial Multidisciplinary Digital Publishing Institute fue la más representada.

INTRODUCTION

The scientific production in the world grows up with the begin of the Covid-19, it was a grateful moment to the science; despite the setback that this pandemic represented for humanity, it allowed the creation of vaccines and methods of action that closed the common cycle of all research: scientific publication.

Authors or Researchers frequently aspire to have high-impact manuscripts in international society, which is why they send their studies to journals that first express interest in the topic and second that are indexed in one of the large global databases such as Scopus and the Core Collection of Web of Science.

To know the effectiveness and rigor of a journal, different indices are used to measure its impact, such as the quartile, the H index, CiteScore, SNIP (Source Normalized Impact per Paper), SJR (Scientific Journal Rankings). These indicators are often used by researchers to establish metrics that object in favor or against the production on certain topics, their scope and impact on the scientific society, in conjunction with other indicators, studies of greater influence are achieved.[1,2]

The citations achieved by a journal determine the interest in the articles published in it, and are also an indicator of the quality and rigor of its editorial process; based on this, the authors aim to characterize the first quartile journals indexed in Scopus with more than 30 000 citations.

METHOD

A metric, descriptive and cross-sectional analysis of the open access journals indexed in Scopus belonging to the Q1 was carried out, from 2019 to 2022.

In the Scopus search engine (https://www.scopus.com/sources.uri) a search for source was performed. In the display options it was selected: show only open access journals, with a minimum number of 30 000 citations, 1st quartile and

as source type: journals, which provided a total of 24 journals to be evaluated.

For each journal, the following data was collected in a Microsoft Excel 2019 worksheet: name of the journal, CiteScore -calculates the number of citations a journal has in the last 4 years, through the articles published in it[3]-, highest percentile (in sub-theme), number of citations, number of documents, % of citations, SNIP -is a measurement factor that counts the frequency with which authors cite other research and the immediacy of citations in publications within the subject field(4)-, SJR -calculates the impact factor of the reports issued by the Scopus database, which makes it a measure of recognition, by the use of all published documents, not only the citable ones[4]-, publisher.

The descriptive statistical processing of the data, as well as the preliminary presentation of the results, was carried out in the spreadsheets of Microsoft Excel 2019.

The data was handled in accordance with scientific ethics. It was not necessary to obtain informed consent or approval endorsements by scientific and/or ethics committees, given the public nature of the analysis units.

RESULTS

A total of 24 journals were obtained; of these, the highest CiteScore index corresponds to Molecular Cancer with 64,9, while the highest number of citations corresponds to the International Journal of Environmental Research and Public Health with 241 049 citations; the CiteScore mean is 13,4 ± 10,5 and citations is 71 658,7 ± 40 550,5. (Figure 1).

The journal with the highest number of documents was the International Journal of Environmental Research and Public Health with 44 775 manuscripts, while the journal with the highest number of citations was Molecular Cancer with 93%; the

mean number of documents was 8 877,9 ± 6 756,2 and the mean % citations was 79,9 ± 7,1. (Figure 2).

Fig 1. - Distribution of journals in terms of CiteScore and citations

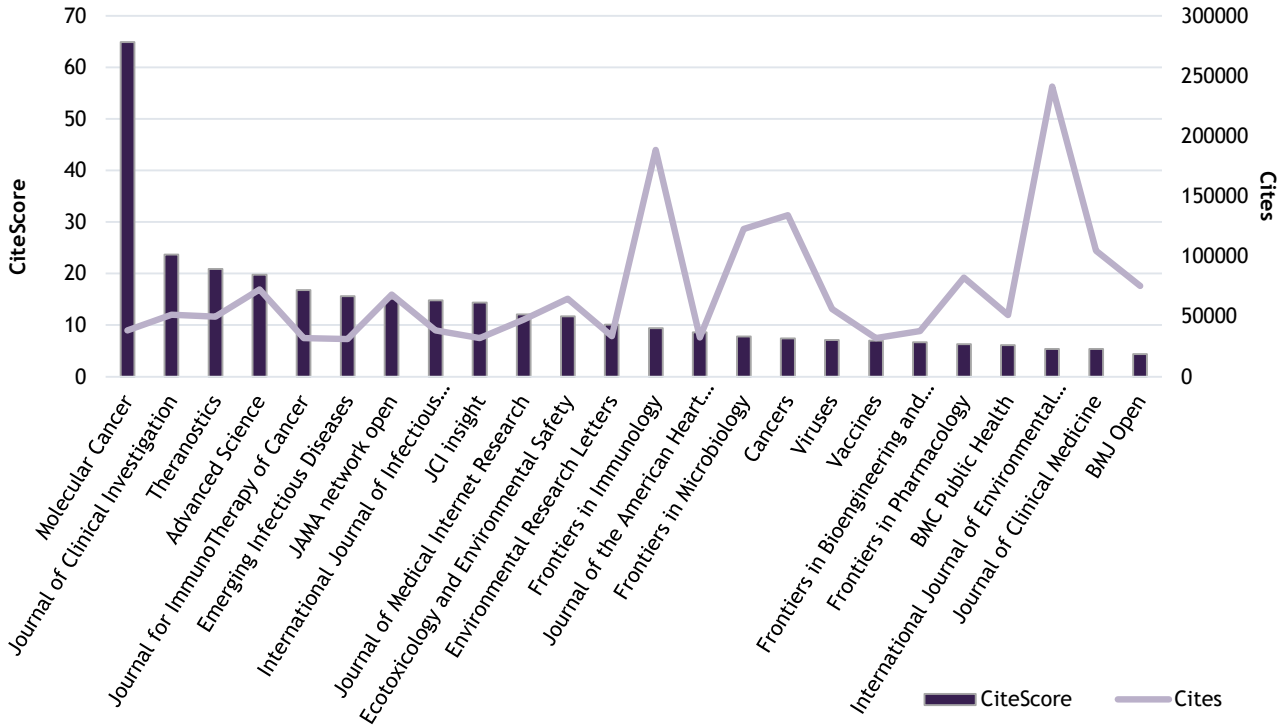


Fig 2. Distribution of journals in terms of number of documents and % of citations.
Note: Ndoc: number of documents; %CT: % of citations.

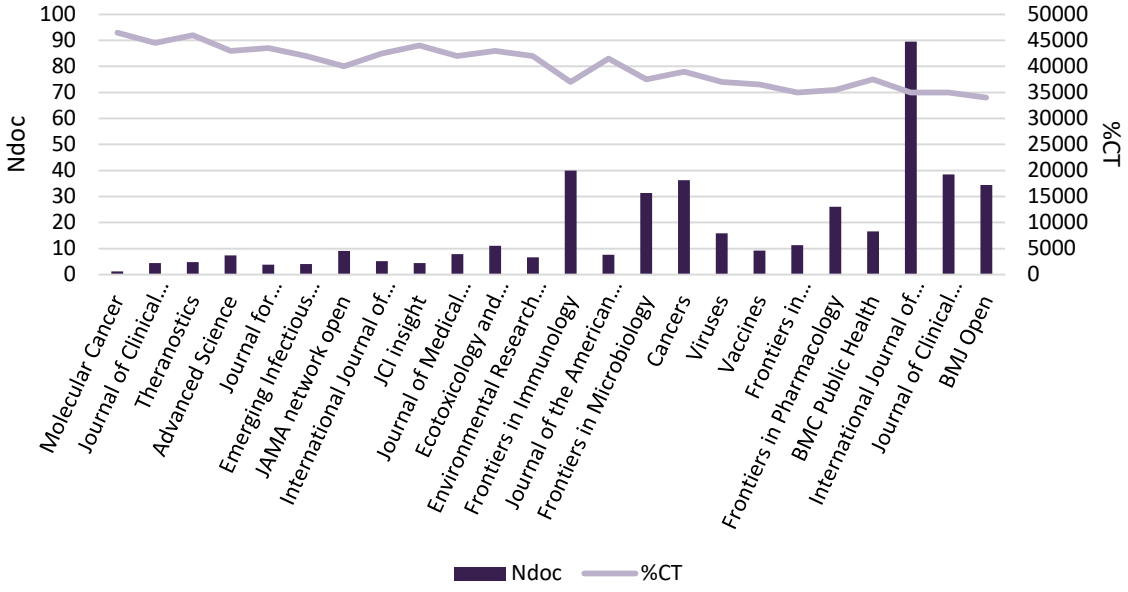


Figure 3 shows the SNIP and SJR of the journals, where it can be seen that the highest SNIP index is 5,74, corresponding to Molecular Cancer, with a mean of 1,825 ± 1,540; and the highest SJR index is 8,703, which belongs to Molecular Cancer, with a mean of 2,386 ± 1,843.

The thematic with the largest number of journals is General Medicine with 5 (20,8 %). (Figure 4)

Fig 3. Distribution of the journals in terms of SNIP and SJR.

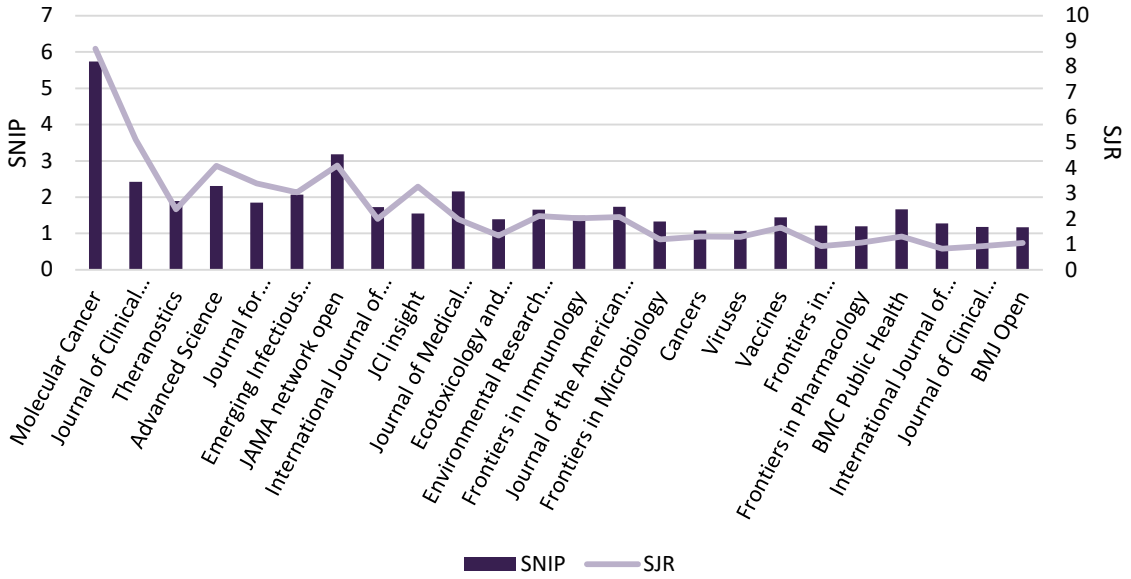
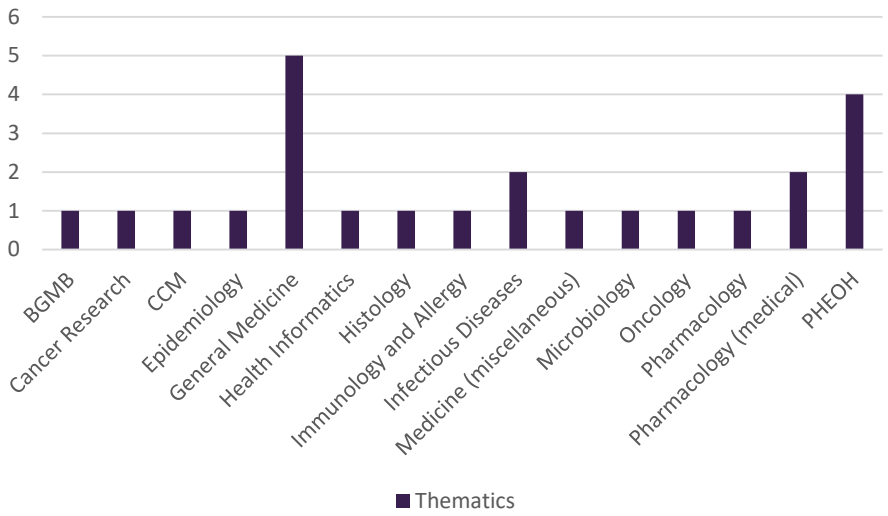


Fig 4. Distribution of the journals in the different thematic..
Note: BGMB: Biochemistry, Genetics and Molecular Biology (miscellaneous), CCM: Cardiology and Cardiovascular Medicine, PHEOH: Public Health, Environmental and Occupational Health



The publisher with the highest number of journals was Multidisciplinary Digital Publishing Institute (MDPI) (n=5; 28,3 %), there were 5 publishers with only 1 journal (4,2 %). (Table 1)

Table 1. Distribution of the journals according to publisher

Publisher	n	%
American Medical Association	1	4,2
American Society for Clinical Investigation	2	8,3
BMJ Publishing Group	2	8,3
Centers for Disease Control and Prevention (CDC)	1	4,2
Elsevier	2	8,3
Frontiers Media S.A.	4	16,7
Institute of Physics Publishing	1	4,2
JMIR Publications Inc.	1	4,2
Ivyspring International Publisher	1	4,2
Multidisciplinary Digital Publishing Institute (MDPI)	5	28,3
Springer Nature	2	8,3
Wiley-Blackwell	2	8,3
Total	24	100

DISCUSSION

Review by academic peers is an indispensable advantage for scientific publication since they are responsible for a true critical evaluation of the veracity, novelty and quality of a study.[5]

The task of reviewer is part of the life and duty of researchers, of those who do science, since it is part of their cultivation of knowledge. Dorta[5] expresses that this work should be an obligation of the researcher towards his teachers, institution and country of training; becoming a moral commitment.

Denying or delaying a review delays the editorial processes, subtracting the quality, rigor and visibility of the journal and the analyzed manuscript; Therefore, the authors consider that those journals indexed in Scopus have large editorial teams and competent and responsible reviewers who carry out their tasks in a harmless manner.

The main indexers in the world -Scopus and Web of Science- created their own version to evaluate the impact factor -Scimago Journal & Rank and Journal Citation Index respectively-[6] in order to establish quality differentiation between journals according to its location by quartiles:

- Q1: any journal that obtains percentiles higher than 75%
- Q2: those of percentiles between 50 and 75%
- Q3: those with percentiles between 25 and 50%
- Q4: those with a lower percentile equal to or less than 25%

Scimago Journal Rank takes its name from the pre-existing algorithm called Google PageRank that has allowed since 1996 to obtain the visibility of the journals found in Scopus. Scimago is a group that is dedicated to research, analysis, recovery and representation of information through the different existing bibliometric techniques; they belong to the Higher Council of Scientific Research. [7]

The Scopus database belongs to the publisher Elsevier, however, the results indicate that the largest number of journals in Q1 with more than 30 000 citations do not belong to this publisher, which the authors consider as an absence of favoritism in this aspect. Despite this, a study published in the Revista Universidad y Sociedad[8] indicated that in the year 2021 the publishers with the greatest impact in the scientific world were in the order of Elsevier, Taylor & Francis and Multidisciplinary Digital Publishing Institute which disagrees with the results obtained in this research, that affirms a fundamental factor, despite the great influence of Elsevier in Scopus and the world, the journals of this publisher do not respond to those with the greatest impact in the scientific society.

This prestigious database has more than 84 million records, more than 17 million scientist profiles, 7 thousand editors and around 2 billion cited reviews; which places it in first place in the databases in terms of quantitative markers and possibly one of the most examined by researchers, academics and students.[9]

The study realized by Bojo Canales and Sanz Valejo[10] showed that there is a strong correlation between the impact factor and the CiteScore of the journals, as well as between the SJR and the SNIP of each one, so that the CiteScore can be used to assess the prestige of a serial publication, which allows us to state that the journal Molecular Cancer has the highest prestige within the Q1 with more than 30,000 citations for the study period

CONCLUSIONS

The journals indexed in Scopus belonging to Q1 in the period from 2019 to 2022 have an average CitaScore of 13,4 and citations is 71 658,7 on average; published an average of 8 877,9 for 79,9 citations, with an average SNIP and SJR of 1,825 and 2,386 respectively, with General Medicine being the most prevalent theme and Multidisciplinary Digital Publishing Institute the most represented publisher.

CONFLICTO DE INTERESES

Los autores declaran la no existencia de conflictos de intereses relacionados con el estudio.

CONTRIBUCIÓN DE AUTORÍA

LEHM: Conceptualización, Curación de datos, Análisis formal, Investigación, Metodología, Administración del proyecto, Recursos, Validación, Redacción del borrador original y Redacción, revisión y edición

YMGC: Curación de datos, Análisis formal, Investigación, Recursos, Software, Visualización, Redacción del borrador original y Redacción, revisión y edición

DCR: Curación de datos, Análisis formal, Investigación, Recursos, Software, Visualización, Redacción del borrador original y Redacción, revisión y edición

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