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A Bibliometric Analysis of Moderna mRNA-1273 Vaccine for COVID-19

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Abstract: We performed the 1st bibliometric analysis of the Moderna mRNA-1273 vaccine (for COVID-19). On May 28, 2021, the data was retrieved from the Scopus database. In total, two hundred and three (n=203) documents are published about Moderna, majorly comprising of reviews (n=84) and articles (n=66). In all documents (reviews and articles only), 1110 authors have significantly contributed. The documents per author were 0.135, while authors per document were 7.4. The collaborative Index (CI) was 8.34. By Lotka's Law, we provided information about the frequency of authors. For example, 1021 authors were involved in one (n=1) publication. The total number of publications, h-index, m-index, g-index, and total citations for all authors are provided. The highest documents are published by the National Institutes of Health NIH (n-8) & Moderna Therapeutics (n=8 and the National Institute of Allergy and Infectious Diseases NIAID (n=7). Fifty-five (n=55) countries have significantly contributed to all publications. The highest documents are published by the United States (n=74), India (n=30), and the United Kingdom (n=16). By Biblioshiny, the co-authorship network is also presented. All documents are published in 118 different sources, majorly in Vaccines (n=6), Frontiers in Immunology (n=5), and New England Journal Of Medicine (n=4). We also provided the H-index, g-index, and m-index of all sources. The top ten (n-10) most cited documents are briefly discussed, while we provided a general overview of the publications by co-words analysis. On December 18, 2020, the Food and Drug Administration (FDA) issued an Emergency Use Authorization (EUA) for the Moderna COVID-19 (mRNA-1273) vaccine.

Keywords: Scopus; Moderna; mRNA-1273; bibliometric analysis.

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1. Introduction

Coronavirus disease 2019 (COVID-19) was 1st detected in Wuhan, China, in December 2019. According to WHO, globally, there have been 168,599,045 confirmed cases of COVID-19, including 3,507,477 deaths (till 28th May, 2021). According to John Hopkin' data, the highest deaths are recorded in United States (n=593,288), followed by Brazil (n=456,674), India (n=318,895), Mexico (n=222,661), United Kingdom (n=128,020), Italy (n=125,793), Russia (n=117,990), France (n=109,327), Germany (n=88,192) and Colombia (n=86,693).

The Moderna COVID-19 Vaccine is a suspension for intramuscular injection administered as a series of two doses (0.5 mL each) 1 month apart. On December 18, 2020, the Food and Drug Administration (FDA) issued an Emergency Use Authorization (EUA) for the Moderna COVID-19 (mRNA-1273) vaccine (ModernaTX, Inc; Cambridge, Massachusetts).

Bibliometrics is a quantitative analysis and statistics of the research publications at the micro (journal, topic, articles) and macro-level (country, institution). It is widely used to evaluate research performance and explore the trends of publications in different areas of research [1-2]. However, this is the 1st bibliometric report about Moderna (vaccine) to the best of our knowledge.

2. Material and Methods

2.1. Ethics statement.

The study did not involve human or nonhuman subjects. Therefore, neither approval by the institutional review board nor informed consent was required.

2.2.Study design.

This was a bibliometric study of a specific topic (Moderna Vaccine) from a literature database.

2.3. Data sources and visualization.

On May 28, 2021, we retrieved the data from Scopus, one of the largest databases in the world. In the search field, the following terms were used, i.e., "Moderna COVID-19 Vaccine" OR "COVID-19 Vaccine Moderna" OR "mRNA-1273" OR "CX-024414" OR "COVID-19 mRNA Vaccine Moderna". It was searched in article titles, abstracts, and keywords, i.e., TIT/ABS/KEYWORDS. For science mapping and visualization, we used VOSviewer version 1.6.9 and Biblioshiny (Bibliometrix).

3. Results and Discussion

Till 28th May 2021, two hundred and three (n=203) documents are published about Moderna COVID-19 vaccine majorly comprising of reviews (n=84), articles (n=66), notes (n=23), letters (n-13), editorials (n=12), short surveys (n=3), book chapters (n=1) and conference papers (n=1). We performed a bibliometric analysis of only articles and reviews (n=150).

3.1. Authors.

Based on Biblioshiny (bibliometric) analysis, 1110 authors have contributed to all publications. Eighteen (n=18) authors published single-authored documents, and 1092 authors published multi-authored documents. In total, nineteen documents were single-authored. The documents per author were 0.135, while the authors per document were 7.4. Collaborative Index (CI) provides quantitaive informaiton about research collaboration. Lawani proposed it in 1986. It can be calculated [C = Total Number of Authors/ Total Number of Papers]. By Biblioshiny, the CI was found to be 8.34. Lotka's Law is normally used to provide brief information about the frequency of publication of authors in a particular research field. According to Lotka's Law, 60%, 15%, and 7% of authors will have three publications, respectively [3-4]. By Biblioshiny, we applied Lotka's Law to present the authors' frequency. It is apparent from Figure 1 that 1021 and 72 authors were involved in one (n=1) and two (n-2) publications, respectively.

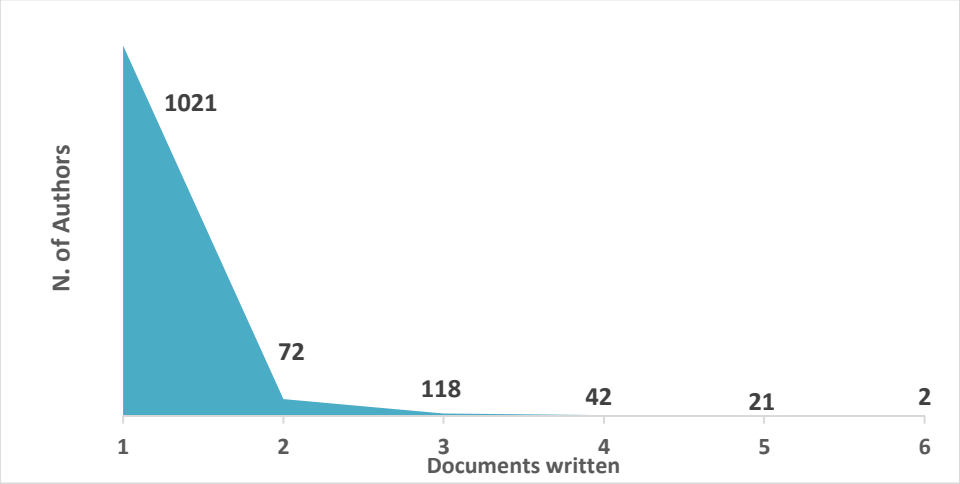

Figure 1. The authors' frequency by Lotka's Law.

We also calculated the authors' impact by using various bibliometric indicators. The overall list is provided in Supplementary Table 1. Based on the number of publications, the top-ranked authors are Bennett, H. (n=7), followed by Corbett, K.S. (n=5) & Doria-Rose, N.A. (n=5). While Anderson, E.J., Flach, B., Graham, B.S., Klimek, L., Leav, B., Ledgerwood, J.E., Mascola, J.R., Schmidt, S.D. and Stevens, L.J., all published four (n=4) documents. Citation Analysis is a bibliometric method that investigates the citations of scientific journals, papers, authors, and other research items through mathematical and statistical methods to retrieve their quantitative characteristics. Citation analysis includes ranking and evaluating an article, journal, or author (based on the number of citations it receives) [3-4]. The highest total citations are recorded for Graham BS (N=1472), Bennett H (N=1291), Corbett KS (n=1077), Doria-Rose NA (n=1077), Schmidt SD (N=1077), Flach B (n-946), Ledgerwood JE (n-946), Chappell JD (n=893), Denison MR (n=893), Mascola JR (N=893), Morabito KM (N=893), and Stevens LJ (n=893).

3.2. Universities.

Based on Vosviewer analysis, 655 institutes or departments have contributed to all publications. Moderna, Cambridge, Ma, United States published the highest documents (n=4). While, Biostatistics Research Branch, Division Of Clinical Research, National Institute Of Allergy And Infectious Diseases, National Institutes Of Health, Bethesda, Md, United States, Department Of Chemical Pathology, School Of Pathology, Faculty Of Health Sciences And National Health Laboratory Service, University Of The Free State, Bloemfontein, South Africa, Department Of Microbiology And Immunology, Drexel University College Of Medicine, Philadelphia, Pa, United States, Discipline Of Pharmacy, Graduate School Of Health, University Of Technology Sydney, Ultimo, Nsw 2007, Australia, Emmes Company, Rockville, Md, United States, Faculty Of Pharmaceutical Sciences, Maharshi Dayanand University, Rohtak, India, Hope clinic, Department Of Medicine, Emory University School Of Medicine, Decatur, Ga, United States, Institute For Biomedical Sciences, George Washington University, Washington, DC, United States, South Dakota Sanford School Of Medicine, Vermillion, Sd, United States, and Vaccine Research Center, National Institute Of Allergy And Infectious Diseases, National Institutes Of Health, Bethesda, Md, United States all contributed in 2 publications. The highest citations were noted for Moderna, Cambridge, Ma, United States (n=1341), followed by Emmes Company, Rockville, Md, United States (n=762) and Hope

Clinic, Department Of Medicine, Emory University School Of Medicine, Decatur, Ga, United States (n=762). We also noted spelling variate (addition of commas, full stop, post box, etc.). Therefore, we further ignored it in the analysis. The highest documents are published by National Institutes of Health NIH (n-8) & Moderna Therapeutics (n=8), National Institute of Allergy and Infectious Diseases NIAID (n=7), followed by Emory University (n-6), Vanderbilt University Medical Center (n=6), Inserm (N=5), Emory University School of Medicine (n=5), Imperial College London (N=5), Brigham and Women's Hospital (n=5), Columbia University Irving Medical Center (n=5) and McMaster University (n=5). The list of the top 100 universities is provided in Supplementary Table 2.

3.3. Countries.

Based on the Scopus record, fifty-five (n=55) countries are directly involved in all publications. Continentally the highest documents are published by Europe (n=91). In fact, a total of nineteen (n=19) countries contributed to all publications. The highest number of documents is published by the United Kingdom (N=16), followed by Germany (n=14), Italy (N=13), France (N=9), and Spain (N=9). North America and the USA produced the 2nd highest documents (n=74). Canada and Mexico published 13 and 2 documents, respectively. From Asia, twelve (n=12) contributed to publications. India publishes the highest number of documents (N=30), followed by China (n-11), Malaysia (n=6), Pakistan (n=4), and Taiwan (n=3). Ten countries from the middle east published 24 documents. Saudi Arabia contributes the highest documents (n=7), followed by Iran (n=4) and Israel (n=3). Australia (n=7), Brazil (N=6), and South Africa are the leading countries from Oceana, South America, and Africa, respectively. Irrespectively of the continent, the highest documents are published by United States (n=74), India (n=30), United Kingdom (n=16), Germany (n=14), Canada (n=13), Italy (N=13), China (N-11), France (n=9), Spain (N=9), Australia (N=7), Saudi Arabia (n=7), Brazil (N=6), Malaysia (n=6) and South Africa (n=6). Forty-one (n=41) countries published less than five (n-5) documents. The list of all countries with the number of publications is provided in Supplementary Table 3. It is worth noting that co-authorship is the most recognized indicator of intellectual collaboration in scientific research. Co-authorship analysis can be properly applied for evaluating the growth and development of research networks since publications are well documented and reflect collaboration. Research collaboration in clusters has been identified as a significant factor in driving productivity and enhancing research publication citation [5-6]. Based on the Biblioshiny, the co-authorship network is presented in Figure 2.

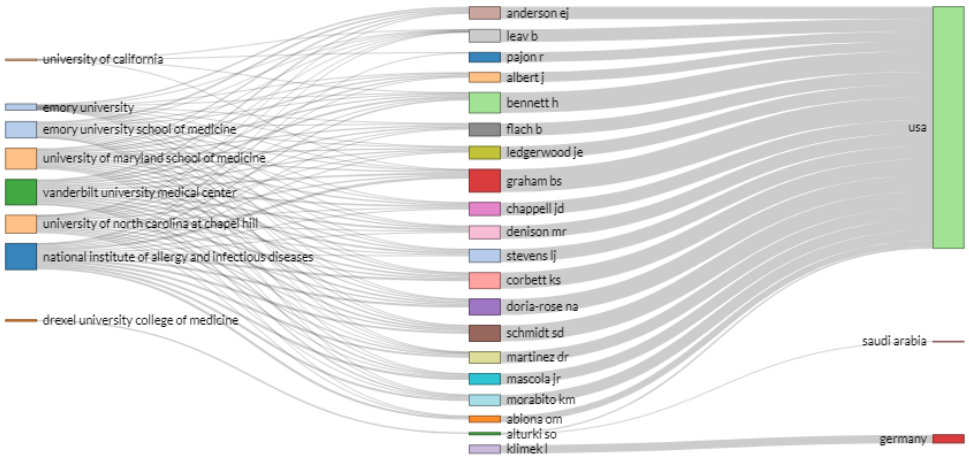

Figure 2. The co-authorship network for authors, institutes, and countries (three fields plot).

3.4. Sources and funding sponsors.

The documents are published in 118 sources. The highest documents are published in Vaccines (n=6), followed by Frontiers in Immunology (n=5), New England Journal Of Medicine (n=4), Viruses (N=3), Morbidity And Mortality Weekly Report (n=3), and Life sciences (n=3). However, the highest citations were recorded for New England Journal Of Medicine (N=1341), International Journal Of Antimicrobial Agents (N=282), International Journal Of Molecular Sciences (N=245), Nature (n=170), and Viruses (n=69). All 118 sources with H-index, g-index, and m-index are described in Supplementary Table 4.

Scopus also provided detailed information about the sponsors. Mostly the publications are sponsored by the National Institutes of Health (N=25), National Institute of Allergy and Infectious Diseases (n-15), Pfizer (N-8), U.S. Department of Health and Human Services (n=8), Biomedical Advanced Research and Development Authority (N-6), Eli Lilly and Company (n=6), and Gilead Sciences (n=5). The list of 100 sponsors is provided in Supplementary Table 5.

3.5. Focus on the top ten most cited documents.

Brief details about the top ten most cited documents are provided below.

The authors conducted a phase 1, dose-escalation, open-label trial in the top-cited article, including 45 healthy adults, 18 to 55 years of age, who received two vaccinations, 28 days apart, with mRNA-1273 in a dose of 25 μg, 100 μg, or 250 μg. Each group has 15 participants. The study was performed between March 16 and April 14, 2020. The candidate vaccine mRNA-1273 is a lipid nanoparticle–encapsulated, nucleoside-modified messenger RNA (mRNA)-based vaccine encodes the SARS-CoV-2 spike (S) glycoprotein. It was administered as a 0.5-ml injection. The vaccine was co-developed by researchers at the National Institute of Allergy and Infectious Diseases (NIAID, the trial sponsor) and Moderna (Cambridge, MA). There were no severe adverse events associated with vaccination. The most common symptoms were fatigue, headache, myalgia, and chills. The vaccine also elicited SARS-CoV-2 antibody responses in a dose-dependent manner. Based on the results, the authors concluded that the mRNA-1273 vaccine-induced anti–SARS-CoV-2 immune responses in all participants, without severe adverse effects [7].

The 2nd most cited document is a phase 3 randomized, observer-blinded, placebo-controlled trial conducted at 99 centers across the United States. The study was performed between July 27 and October 23, 2020. The study included 30,420 volunteers. Two intramuscular injections of mRNA-1273 (100 μg) or placebo were given to all participants (15,210 in each group). More than 96% of participants received both injections. The authors confirmed that the mRNA-1273 vaccine showed 94.1% efficacy in preventing Covid-19 illness [8].

The 3rd highest cited document is a review, where the authors discussed the epidemiology, diagnosis, isolation, and treatments of COVID-19. They also highlighted treatment options including antiviral agents, chloroquine and hydroxychloroquine, corticosteroids, antibodies, convalescent plasma transfusion, and various vaccines (including Moderna) [9].

In this (4th cited) article, the authors presented a succinct overview of the epidemiology, clinical features, and molecular characteristics of SARS-CoV-2. They also briefly discussed various drugs or candidate drugs (or vaccines) like remdesivir (GS-5734), favipiravir,

developed by Toyama Chemical (a division of Fujifilm, Japan), Ivermectin is an FDA-approved anti-parasitic agent, lopinavir/ritonavir, hydroxychloroquine, arbidol hydrochloride (Umifenovir), thalidomide, methylprednisolone, fingolimod, bevacizumab, mRNA-1273 (Moderna), INO-4800 and ChAdOx1 nCoV-19 [10].

Initially, the authors conducted a phase 1, dose-escalation, open-label clinical trial of mRNA-1273 involving participants between 18 and 55 years. They subsequently expanded the trial to include 40 56 years of age or older participants. They were further divided into two subgroups: those between the ages of 56 and 70 years and those who were 71 years of age or older. In total, 40 adults were included in this study. Mild adverse events were noted, and fatigue, chills, headache, myalgia, and pain at the injection site were recorded. In this small study involving older adults, the 100-μg dose supports the resulted outcome. This document received the 5th highest citations [11].

In the sixth highly cited document, the authors worked on male and female Indian-origin rhesus macaques. They received 10 or 100 μg of mRNA-1273. Similarly, a panel of 42 human convalescent-phase serum specimens was obtained from persons between 18 and 84 years of age. All participants had a history of laboratory-confirmed SARS-CoV-2 infection roughly 1 to 2 months before providing specimens. The authors evaluated temporal SARS-CoV-2 S-2P–specific antibody responses after vaccination. The authors concluded that mRNA-1273 induced robust SARS-CoV-2 neutralizing activity, rapid protection in the upper and lower airways, and no pathologic changes in the lung [12].

In this report, the authors showed that mRNA-1273 induces potent neutralizing antibody responses to both wild-type (D614) and D614G mutant2 SARS-CoV-2 and CD8+ T cell responses protect against SARS-CoV-2 infection in the lungs and noses of mice without evidence of immunopathology. This is the seventh highest cited document [13].

In the phase 1 trial of a messenger RNA vaccine, mRNA-1273, those interim results covered 57 days after the first vaccination. They extended the idea and collected the immunogenicity data 119 days after the first vaccination (90 days after the second).

18 to 55 years, 56 to 70 years, or ≥71 years old subjects were included in this study. The authors did not notice any serious adverse events in this trial [14].

In this review (9th highly cited), the authors provided the rationale for developing mRNA-based SARS-CoV-2 vaccines and their current status. They briefly discussed mRNA-based SARS-CoV-2 vaccines engineering and the potential advantages and limitations of mRNA-based SARS-CoV-2 vaccines [15].

In this report (10th highly cited), the authors provided a comprehensive overview of COVID-19 epidemiology, genomic etiology, findings from recent transcriptomic map analysis, viral-human protein interactions, molecular diagnostics, and the current status of vaccine and novel therapeutic interventions [16].

3.6. Co-words analysis.

Co-word analysis is used to study the co-occurrence of two (or more) keywords within a research document. It can help researchers recognize the key patterns and trends in a particular research field [17-18]. We manually analyzed the 160 keywords (provided by Scopus). The studies covered Phase 1, 2, and 3 Clinical Trials. The authors explored the drug effect, drug therapy, drug development, administration and dosage, drug delivery system, drug formulation, drug repositioning, drug efficacy, drug safety, prevention and control, metabolism, physiology, and epidemiology. They also covered immunology, immune

response, Immunization, vaccine immunogenicity, innate immunity, humoral immunity, immunotherapy, and immunogenicity. The following keywords with the number of times of appearance may also describe the focus of these publications. mRNA-1273 Vaccine (n=92), RNA Vaccine (N-47), mRNA 1273 (n=44), Messenger RNA (n=33), mRNA 1273 (n=20), coronavirus infections (N=29), coronavirus spike glycoprotein (N=29), pneumonia, viral (n=27), adverse event (n=26), angiotensin-converting enzyme 2 (n=22), recombinant vaccine (N=23), antibody response (N=20), spike glycoprotein, coronavirus (n=20), antibodies, neutralizing (N=19), antibodies, viral (n=19), gam-covid-vac (n=17), spike protein, SARS-CoV-2 (n=17), and Food And Drug Administration (n=13). Their interconnectivity and trend in publications are described in Figure 3A&B.

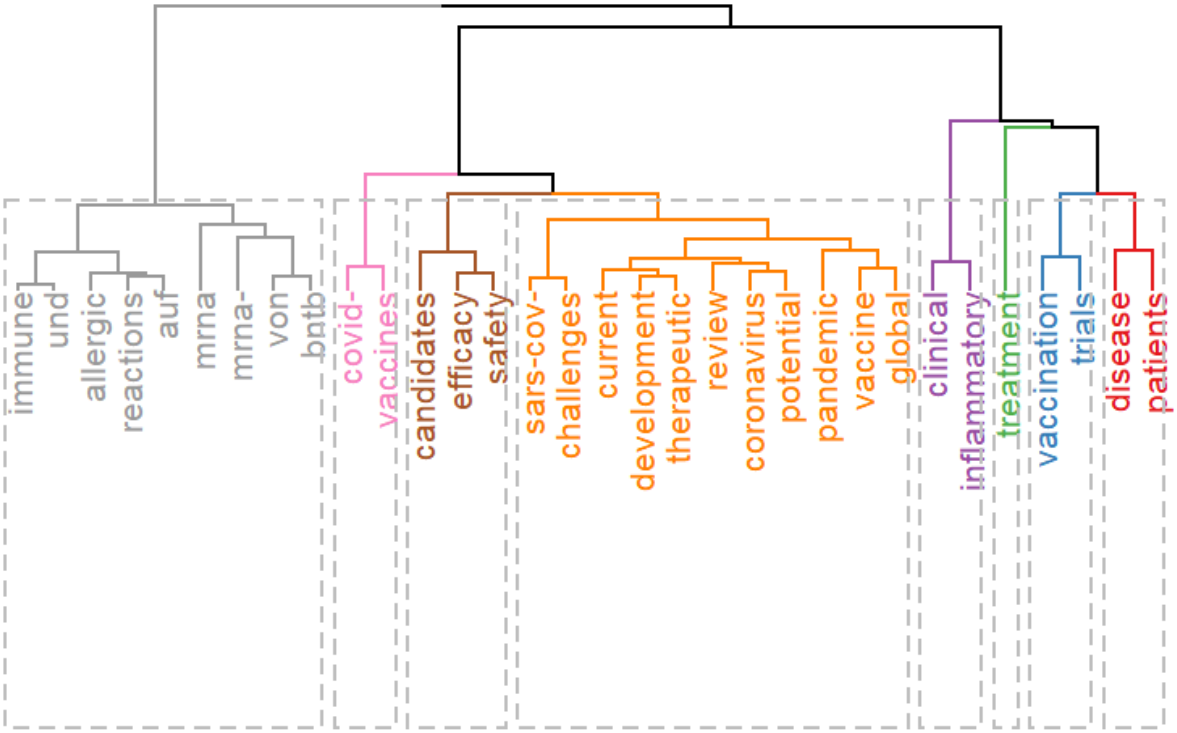

Figure 3a. The major focus of publications of all publications.

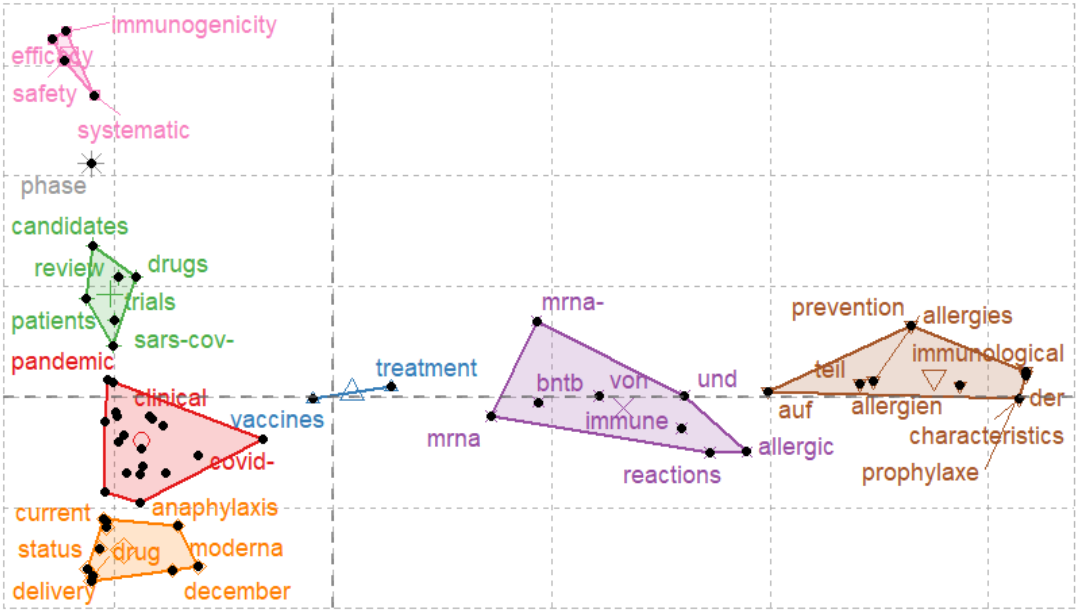

Figure 3b. The major focus of publications of all publications.

4. Limitation

One major limitation is that we only explored Scopus, and other common databases, such as PubMed, Embase, and WoS, were not searched.

Data Availability

The data is retrieved from the Scopus database.

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None.

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We sincerely appreciate all researchers, institutes, and countries' hard work in combating this global pandemic.

Conflict of Interest

There is no conflict of interest.

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Supplementary Materials

Supplementary Table 1. Different bibliometric indicators (h, g, and m-indexes) NP, and TC for authors. NP= Number of Publications and TC= Total citations.

Author	h_index	g_index	m_index	TC	NP	Year
GRAHAM BS	5	5	2.5	1472	5	2020
BENNETT H	4	5	2	1291	5	2020
CORBETT KS	4	4	2	1077	4	2020
DORIA-ROSE NA	4	4	2	1077	4	2020
SCHMIDT SD	4	4	2	1077	4	2020
FLACH B	3	3	1.5	946	3	2020
LEDGERWOOD JE	3	3	1.5	946	3	2020
CHAPPELL JD	3	3	1.5	893	3	2020
DENISON MR	3	3	1.5	893	3	2020
MASCOLA JR	3	3	1.5	893	3	2020
MORABITO KM	3	3	1.5	893	3	2020
STEVENS LJ	3	3	1.5	893	3	2020
ANDERSON EJ	2	3	1	764	3	2020
ALBERT J	2	2	1	762	2	2020
BEIGEL JH	2	2	1	762	2	2020
BUCHANAN W	2	2	1	762	2	2020
CROSS K	2	2	1	762	2	2020
JACKSON LA	2	2	1	762	2	2020
MAKHENE M	2	2	1	762	2	2020
MAKOWSKI M	2	2	1	762	2	2020
MCDERMOTT A	2	2	1	762	2	2020
NEUZIL KM	2	2	1	762	2	2020
PADILLA M	2	2	1	762	2	2020
PRUIJSSERS AJ	2	2	1	762	2	2020
ROBERTS PC	2	2	1	762	2	2020
ROUPHAEL NG	2	2	1	762	2	2020
SWANSON II	2	2	1	762	2	2020
LEAV B	3	3	1.5	582	3	2020
COLER RN	1	1	0.5	578	1	2020
MCCULLOUGH MP	1	1	0.5	578	1	2020
ODELL S	1	1	0.5	578	1	2020
PETERS E	1	1	0.5	578	1	2020
PIKAART-TAUTGES R	1	1	0.5	578	1	2020
SUN W	1	1	0.5	578	1	2020
MARTINEZ DR	3	3	1.5	499	3	2020
CREECH CB	2	2	2	402	2	2021
PAJON R	3	3	3	401	3	2021
ROUPHAEL N	2	2	2	397	2	2021
BADEN LR	1	1	1	395	1	2021
BROSZ A	1	1	1	395	1	2021
COREY L	1	1	1	395	1	2021
COVE STUDY GROUP COVESG	1	1	1	395	1	2021
DENG W	1	1	1	395	1	2021
DIEMERT D	1	1	1	395	1	2021
EL SAHLY HM	1	1	1	395	1	2021
ESSINK B	1	1	1	395	1	2021
FIERRO C	1	1	1	395	1	2021
FOLLMANN D	1	1	1	395	1	2021
FREY S	1	1	1	395	1	2021
GILBERT P	1	1	1	395	1	2021
HAN S	1	1	1	395	1	2021
IVARSSON M	1	1	1	395	1	2021
JANES H	1	1	1	395	1	2021
KHETAN S	1	1	1	395	1	2021
KNIGHTLY C	1	1	1	395	1	2021
KOTLOFF K	1	1	1	395	1	2021
LEDGERWOOD J	1	1	1	395	1	2021
MAROVICH M	1	1	1	395	1	2021
MASCOLA J	1	1	1	395	1	2021
MCGETTIGAN J	1	1	1	395	1	2021
MILLER J	1	1	1	395	1	2021
NEUZIL K	1	1	1	395	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
NOVAK R	1	1	1	395	1	2021
POLAKOWSKI L	1	1	1	395	1	2021
SCHWARTZ H	1	1	1	395	1	2021
SEGALL N	1	1	1	395	1	2021
SOLIS J	1	1	1	395	1	2021
SPECTOR SA	1	1	1	395	1	2021
ZAKS T	1	1	1	395	1	2021
ZHOU H	1	1	1	395	1	2021
LIN BC	2	2	1	368	2	2020
O'DELL S	2	2	1	368	2	2020
ABIONA OM	2	2	1	315	2	2020
ALVARADO GS	2	2	1	315	2	2020
BARIC RS	2	2	1	315	2	2020
BOCK KW	2	2	1	315	2	2020
BOYOGLU-BARNUM S	2	2	1	315	2	2020
CARFI A	2	2	1	315	2	2020
CHANG LA	2	2	1	315	2	2020
EDWARDS DK	2	2	1	315	2	2020
GILLESPIE RA	2	2	1	315	2	2020
HIMANSU S	2	2	1	315	2	2020
KONG WP	2	2	1	315	2	2020
LEUNG K	2	2	1	315	2	2020
LOOMIS RJ	2	2	1	315	2	2020
LOUDER MK	2	2	1	315	2	2020
MINAI M	2	2	1	315	2	2020
MOORE IN	2	2	1	315	2	2020
NAGATA BM	2	2	1	315	2	2020
NASON MC	2	2	1	315	2	2020
PHUNG E	2	2	1	315	2	2020
RUCKWARDT TJ	2	2	1	315	2	2020
SHI W	2	2	1	315	2	2020
STEWART-JONES G	2	2	1	315	2	2020
WANG L	2	2	1	315	2	2020
YANG ES	2	2	1	315	2	2020
ZHANG Y	2	2	1	315	2	2020
DING Y	1	1	0.5	282	1	2020
LI Y	1	1	0.5	282	1	2020
LONG J	1	1	0.5	282	1	2020
WU X	1	1	0.5	282	1	2020
ZHAI P	1	1	0.5	282	1	2020
ZHONG Y	1	1	0.5	282	1	2020
CHIEN CS	1	1	0.5	245	1	2020
CHIOU SH	1	1	0.5	245	1	2020
CHOU SJ	1	1	0.5	245	1	2020
LAI WY	1	1	0.5	245	1	2020
LIN YT	1	1	0.5	245	1	2020
LIN YY	1	1	0.5	245	1	2020
LUO YH	1	1	0.5	245	1	2020
TU YF	1	1	0.5	245	1	2020
WANG ML	1	1	0.5	245	1	2020
YANG DM	1	1	0.5	245	1	2020
YANG YP	1	1	0.5	245	1	2020
YARMISHYN AA	1	1	0.5	245	1	2020
EDARA VV	2	2	1	186	2	2020
FLOYD K	2	2	1	186	2	2020
SUTHAR MS	2	2	1	186	2	2020
ANDERSEN H	1	1	0.5	184	1	2020
BARIC R	1	1	0.5	184	1	2020
BROWNE S	1	1	0.5	184	1	2020
CAMPBELL TA	1	1	0.5	184	1	2020
COOK A	1	1	0.5	184	1	2020
DODSON A	1	1	0.5	184	1	2020
DONALDSON MM	1	1	0.5	184	1	2020
DOUEK N	1	1	0.5	184	1	2020
FLEBBE DR	1	1	0.5	184	1	2020
FLYNN B	1	1	0.5	184	1	2020

Author	h_index	g_index	m_index	TC	NP	Year
FOULDS KE	1	1	0.5	184	1	2020
FRANCICA JR	1	1	0.5	184	1	2020
GAUDINSKI MR	1	1	0.5	184	1	2020
GORDON I	1	1	0.5	184	1	2020
GREENHOUSE J	1	1	0.5	184	1	2020
KWONG PD	1	1	0.5	184	1	2020
LAMB E	1	1	0.5	184	1	2020
LEWIS MG	1	1	0.5	184	1	2020
LUKE CJ	1	1	0.5	184	1	2020
MCDERMOTT AB	1	1	0.5	184	1	2020
MOLIVA JI	1	1	0.5	184	1	2020
NJI NN	1	1	0.5	184	1	2020
NOE AT	1	1	0.5	184	1	2020
NOVIK L	1	1	0.5	184	1	2020
O'CONNELL S	1	1	0.5	184	1	2020
PEGU A	1	1	0.5	184	1	2020
PESSAINT L	1	1	0.5	184	1	2020
PHADKE VK	1	1	0.5	184	1	2020
PUTMAN-TAYLOR T	1	1	0.5	184	1	2020
ROEDERER M	1	1	0.5	184	1	2020
ROSTAD CA	1	1	0.5	184	1	2020
SEDER RA	1	1	0.5	184	1	2020
STEINGREBE K	1	1	0.5	184	1	2020
STRASBAUGH A	1	1	0.5	184	1	2020
SULLIVAN NJ	1	1	0.5	184	1	2020
TENG IT	1	1	0.5	184	1	2020
TODD JPM	1	1	0.5	184	1	2020
VAN RY A	1	1	0.5	184	1	2020
WERNER AP	1	1	0.5	184	1	2020
WIDGE A	1	1	0.5	184	1	2020
WIDGE AT	1	1	0.5	184	1	2020
YAP C	1	1	0.5	184	1	2020
ZHOU T	1	1	0.5	184	1	2020
WANG N	2	2	1	141	2	2020
ALTARAS NE	1	1	0.5	131	1	2020
BAHL K	1	1	0.5	131	1	2020
DINNON KH	1	1	0.5	131	1	2020
DIPIAZZA AT	1	1	0.5	131	1	2020
ELBASHIR SM	1	1	0.5	131	1	2020
FRITCH EJ	1	1	0.5	131	1	2020
GARCIA-DOMINGUEZ D	1	1	0.5	131	1	2020
GULLY KL	1	1	0.5	131	1	2020
HENRY C	1	1	0.5	131	1	2020
HUTCHINSON GB	1	1	0.5	131	1	2020
LEIST SR	1	1	0.5	131	1	2020
LIU C	1	1	0.5	131	1	2020
MA LZ	1	1	0.5	131	1	2020
MCLELLAN JS	1	1	0.5	131	1	2020
METKAR M	1	1	0.5	131	1	2020
NARAYANAN E	1	1	0.5	131	1	2020
PRESNYAK V	1	1	0.5	131	1	2020
RENZI I	1	1	0.5	131	1	2020
SCHFER A	1	1	0.5	131	1	2020
SHAW CA	1	1	0.5	131	1	2020
WEST A	1	1	0.5	131	1	2020
WOODS A	1	1	0.5	131	1	2020
WRAPP D	1	1	0.5	131	1	2020
WU K	1	1	0.5	131	1	2020
ZIWAWO CT	1	1	0.5	131	1	2020
KREAM RM	1	1	0.5	65	1	2020
STEFANO GB	1	1	0.5	65	1	2020
WANG F	1	1	0.5	65	1	2020
ADRIAN TE	1	1	0.5	57	1	2020
AL-MARZOUQI AHH	1	1	0.5	57	1	2020
AL SUWAIDI H	1	1	0.5	57	1	2020
ALSABEEHA N	1	1	0.5	57	1	2020

Author	h_index	g_index	m_index	TC	NP	Year
ALSHEIKH-ALI A	1	1	0.5	57	1	2020
ELDIN AK	1	1	0.5	57	1	2020
LONEY T	1	1	0.5	57	1	2020
MUSTAFA F	1	1	0.5	57	1	2020
NOWOTNY N	1	1	0.5	57	1	2020
RIZVI TA	1	1	0.5	57	1	2020
SENOK AC	1	1	0.5	57	1	2020
STEFANINI C	1	1	0.5	57	1	2020
UDDIN M	1	1	0.5	57	1	2020
BHANDARI M	1	1	0.5	52	1	2020
CHAGLA Z	1	1	0.5	52	1	2020
CHANG Y	1	1	0.5	52	1	2020
DEVJI T	1	1	0.5	52	1	2020
EKHTIARI S	1	1	0.5	52	1	2020
MAIN C	1	1	0.5	52	1	2020
PHILLIPS SA	1	1	0.5	52	1	2020
VANNABOUATHONG C	1	1	0.5	52	1	2020
ZHU M	1	1	0.5	52	1	2020
DONG Y	1	2	0.5	49	2	2020
DAI T	1	1	0.5	49	1	2020
WEI Y	1	1	0.5	49	1	2020
ZHANG L	1	1	0.5	49	1	2020
ZHENG M	1	1	0.5	49	1	2020
ZHOU F	1	1	0.5	49	1	2020
BRITTON PN	1	1	0.5	46	1	2020
CHIU C	1	1	0.5	46	1	2020
JOO YJ	1	1	0.5	46	1	2020
KHATAMI A	1	1	0.5	46	1	2020
KOIRALA A	1	1	0.5	46	1	2020
ABERNATHY ME	1	1	1	39	1	2021
BARNES CO	1	1	1	39	1	2021
BIENIASZ PD	1	1	1	39	1	2021
BJORKMAN PJ	1	1	1	39	1	2021
CASELLAS R	1	1	1	39	1	2021
CASKEY M	1	1	1	39	1	2021
CIPOLLA M	1	1	1	39	1	2021
COLBERT RA	1	1	1	39	1	2021
DA SILVA J	1	1	1	39	1	2021
DIZON J	1	1	1	39	1	2021
FINKIN S	1	1	1	39	1	2021
GAEBLER C	1	1	1	39	1	2021
GAZUMYAN A	1	1	1	39	1	2021
GORDON K	1	1	1	39	1	2021
HATZIIOANNOU T	1	1	1	39	1	2021
HUEY-TUBMAN KE	1	1	1	39	1	2021
HURLEY A	1	1	1	39	1	2021
LIEBERMAN JA	1	1	1	39	1	2021
MILLARD KG	1	1	1	39	1	2021
MUECKSCH F	1	1	1	39	1	2021
NUSSENZWEIG MC	1	1	1	39	1	2021
OLIVEIRA TY	1	1	1	39	1	2021
PATEL R	1	1	1	39	1	2021
RAMOS V	1	1	1	39	1	2021
SCHAEFER-BABAJEW D	1	1	1	39	1	2021
SCHMIDT F	1	1	1	39	1	2021
SHIMELIOVICH I	1	1	1	39	1	2021
TURROJA M	1	1	1	39	1	2021
UNSON-OBRIEN C	1	1	1	39	1	2021
WANG Z	1	1	1	39	1	2021
WEISBLUM Y	1	1	1	39	1	2021
WEST KA	1	1	1	39	1	2021
XU J	1	1	1	39	1	2021
YANG Z	1	1	1	39	1	2021
ALAM A	1	1	0.5	33	1	2020
CHOWDHURY MA	1	1	0.5	33	1	2020
HOSSAIN N	1	1	0.5	33	1	2020

Author	h_index	g_index	m_index	TC	NP	Year
KASHEM MA	1	1	0.5	33	1	2020
SHAHID MA	1	1	0.5	33	1	2020
DING H	1	1	0.5	30	1	2020
KLASSE PJ	1	1	0.5	30	1	2020
MOORE JP	1	1	0.5	30	1	2020
SHARMA O	1	1	0.5	30	1	2020
SULTAN AA	1	1	0.5	30	1	2020
TRIGGLE CR	1	1	0.5	30	1	2020
GODUGU C	1	1	0.5	26	1	2020
POOLADANDA V	1	1	0.5	26	1	2020
THATIKONDA S	1	1	0.5	26	1	2020
WU SC	1	1	0.5	26	1	2020
BELL BP	1	1	1	19	1	2021
CAMPOS-OUTCALT D	1	1	1	19	1	2021
CHAMBERLAND M	1	1	1	19	1	2021
CURRAN KG	1	1	1	19	1	2021
DOOLING K	1	1	1	19	1	2021
GARGANO JW	1	1	1	19	1	2021
KEIPP TALBOT H	1	1	1	19	1	2021
LEE GM	1	1	1	19	1	2021
MARIN M	1	1	1	19	1	2021
MBAEYI S	1	1	1	19	1	2021
MCCLUNG N	1	1	1	19	1	2021
MORGAN RL	1	1	1	19	1	2021
OLIVER SE	1	1	1	19	1	2021
ROMERO JR	1	1	1	19	1	2021
WALLACE M	1	1	1	19	1	2021
KHUROO MS	1	1	0.5	18	1	2020
KHUROO M	1	1	0.5	18	1	2020
KHUROO NS	1	1	0.5	18	1	2020
SOFI AA	1	1	0.5	18	1	2020
MUKHERJEE R	1	1	0.5	17	1	2020
DU L	1	1	1	16	1	2021
JIANG S	1	1	1	16	1	2021
SU S	1	1	1	16	1	2021
BRISSE M	1	1	0.5	14	1	2020
KIRK N	1	1	0.5	14	1	2020
LIANG Y	1	1	0.5	14	1	2020
LY H	1	1	0.5	14	1	2020
VRBA SM	1	1	0.5	14	1	2020
ABBURI C	1	1	0.5	13	1	2020
JOHN A	1	1	0.5	13	1	2020
KANDIMALLA R	1	1	0.5	13	1	2020
REDDY PH	1	1	0.5	13	1	2020
VALLAMKONDU J	1	1	0.5	13	1	2020
ARANDA P	1	1	0.5	12	1	2020
DARDER M	1	1	0.5	12	1	2020
DEL REAL G	1	1	0.5	12	1	2020
MARTN-SAMPEDRO R	1	1	0.5	12	1	2020
RUIZ-GARCIA C	1	1	0.5	12	1	2020
RUIZ-HITZKY E	1	1	0.5	12	1	2020
WICKLEIN B	1	1	0.5	12	1	2020
BABAGBEMI K	1	1	1	11	1	2021
BALAZS AB	1	1	1	11	1	2021
DODELZON K	1	1	1	11	1	2021
DROTMAN M	1	1	1	11	1	2021
FELDMAN J	1	1	1	11	1	2021
GARCIA-BELTRAN WF	1	1	1	11	1	2021
GARCIA ZH	1	1	1	11	1	2021
GREGORY DJ	1	1	1	11	1	2021
HAUSER BM	1	1	1	11	1	2021
IAFRATE AJ	1	1	1	11	1	2021
LAM EC	1	1	1	11	1	2021
LEVY AD	1	1	1	11	1	2021
MCGRATH AL	1	1	1	11	1	2021
MEHTA N	1	1	1	11	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
NARANBHAI V	1	1	1	11	1	2021
NITIDO AD	1	1	1	11	1	2021
PAVLOVIC MN	1	1	1	11	1	2021
POZNANSKY MC	1	1	1	11	1	2021
SALES RM	1	1	1	11	1	2021
SCHMIDT AG	1	1	1	11	1	2021
SIGAL A	1	1	1	11	1	2021
SHI Y	1	1	0.5	10	1	2020
TUMBAN E	1	1	1	10	1	2021
ZOU QM	1	1	0.5	10	1	2020
AMENTA F	1	1	0.5	9	1	2020
ANCHORDOQUY TJ	1	1	1	9	1	2021
ARVAY ML	1	1	1	9	1	2021
BEITEL S	1	1	1	9	1	2021
BROWN RT	1	1	1	9	1	2021
BURGESS JL	1	1	1	9	1	2021
CABAN-MARTINEZ AJ	1	1	1	9	1	2021
CROMMELIN DJA	1	1	1	9	1	2021
DUNNIGAN K	1	1	1	9	1	2021
EDWARDS LJ	1	1	1	9	1	2021
ELLINGSON K	1	1	1	9	1	2021
FOWLKES A	1	1	1	9	1	2021
FRY AM	1	1	1	9	1	2021
GAGLANI M	1	1	1	9	1	2021
GERALD J	1	1	1	9	1	2021
GRANT L	1	1	1	9	1	2021
GROOM HC	1	1	1	9	1	2021
GROOVER KD	1	1	1	9	1	2021
HARRIS KM	1	1	1	9	1	2021
HEGMANN KT	1	1	1	9	1	2021
HERRING MK	1	1	1	9	1	2021
HUNT DR	1	1	1	9	1	2021
IVACIC L	1	1	1	9	1	2021
JISKOOT W	1	1	1	9	1	2021
JOSEPH G	1	1	1	9	1	2021
KUNTZ JL	1	1	1	9	1	2021
KUTTY P	1	1	1	9	1	2021
LAMBERTE JM	1	1	1	9	1	2021
LUTRICK K	1	1	1	9	1	2021
MAK J	1	1	1	9	1	2021
MASTROBATTISTA E	1	1	1	9	1	2021
MEECE J	1	1	1	9	1	2021
MISHRA SK	1	1	1	9	1	2021
MORRILL TC	1	1	1	9	1	2021
NALEWAY AL	1	1	1	9	1	2021
NITTARI G	1	1	0.5	9	1	2020
ODEAN MJ	1	1	1	9	1	2021
OLSHO LEW	1	1	1	9	1	2021
PALLOTTA G	1	1	0.5	9	1	2020
PHILLIPS AL	1	1	1	9	1	2021
RIVERS P	1	1	1	9	1	2021
SCHAEFER-SOLLE N	1	1	1	9	1	2021
SMITH ME	1	1	1	9	1	2021
STEFANSKI E	1	1	1	9	1	2021
SUN X	1	1	1	9	1	2021
TAYEBATI SK	1	1	0.5	9	1	2020
THIESE MS	1	1	1	9	1	2021
THOMPSON MG	1	1	1	9	1	2021
TRIPATHI T	1	1	1	9	1	2021
TYNER HL	1	1	1	9	1	2021
VOLKIN DB	1	1	1	9	1	2021
WESLEY MG	1	1	1	9	1	2021
YOO YM	1	1	1	9	1	2021
YOON SK	1	1	1	9	1	2021
ZUNIE T	1	1	1	9	1	2021
ALTURKI SO	1	1	0.5	8	1	2020

Author	h_index	g_index	m_index	TC	NP	Year
CONNORS J	1	2	0.5	8	2	2020
HADDAD EK	1	2	0.5	8	2	2020
WORM M	2	2	2	8	2	2021
CUSIMANO G	1	1	0.5	8	1	2020
IZMIRLY AM	1	1	0.5	8	1	2020
KUTZLER MA	1	1	0.5	8	1	2020
ROYCHOUDHURY S	1	1	0.5	7	1	2020
BHATTACHARJEE S	1	1	0.5	7	1	2020
CAJUB DE BRITTO LIRA NOGUEIRA M	1	1	0.5	7	1	2020
CAVALCANTI IDL	1	1	0.5	7	1	2020
CHOUDHURY AP	1	1	0.5	7	1	2020
CHUNG JY	1	1	1	7	1	2021
DAS A	1	1	0.5	7	1	2020
DUTTA S	1	1	0.5	7	1	2020
FUZAYEL AHMED AB	1	1	0.5	7	1	2020
KIS Z	1	1	1	7	1	2021
KONTORAVDI C	1	1	1	7	1	2021
KWON YJ	1	1	1	7	1	2021
SAMUELS RJ	1	1	1	7	1	2021
SENGUPTA P	1	1	0.5	7	1	2020
SHAH N	1	1	1	7	1	2021
SHATTOCK R	1	1	1	7	1	2021
SLAMA P	1	1	0.5	7	1	2020
THONE MN	1	1	1	7	1	2021
WALKER SC	1	1	1	7	1	2021
ANAND K	2	2	1	6	2	2020
CHELLAPPAN DK	2	2	1	6	2	2020
DUA K	2	2	1	6	2	2020
DUREJA H	2	2	1	6	2	2020
GUPTA G	2	2	1	6	2	2020
MEHTA M	2	2	1	6	2	2020
PRASHER P	2	2	1	6	2	2020
SATIJA S	2	2	1	6	2	2020
SHASTRI MD	2	2	1	6	2	2020
ANSOTEGUI IJ	1	1	1	6	1	2021
CAMPBELL DE	1	1	1	6	1	2021
CARDONA V	1	1	1	6	1	2021
CARVALHO T	1	1	1	6	1	2021
EBISAWA M	1	1	1	6	1	2021
EL-GAMAL Y	1	1	1	6	1	2021
FINEMAN S	1	1	1	6	1	2021
GELLER M	1	1	1	6	1	2021
GONZALEZ-ESTRADA A	1	1	1	6	1	2021
GREENBERGER PA	1	1	1	6	1	2021
IWASAKI A	1	1	1	6	1	2021
KRAMMER F	1	1	1	6	1	2021
LEUNG ASY	1	1	1	6	1	2021
LEVIN ME	1	1	1	6	1	2021
MURARO A	1	1	1	6	1	2021
SENNA G	1	1	1	6	1	2021
SNCHEZ BORGES M	1	1	1	6	1	2021
TANNO LK	1	1	1	6	1	2021
TURNER PJ	1	1	1	6	1	2021
YU-HOR THONG B	1	1	1	6	1	2021
KLIMEK L	2	2	2	5	4	2021
AHMAD T	1	1	1	5	1	2021
AKRAM J	1	1	1	5	1	2021
ALEXANDER JL	1	1	1	5	1	2021
ARASARADNAM R	1	1	1	5	1	2021
ARNOTT I	1	1	1	5	1	2021
BUKHARI IA	1	1	1	5	1	2021
CIRILLO N	1	1	1	5	1	2021
DHAR A	1	1	1	5	1	2021
DIN S	1	1	1	5	1	2021
DOBSON L	1	1	1	5	1	2021
GAYA DR	1	1	1	5	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
GLATTER J	1	1	1	5	1	2021
HART A	1	1	1	5	1	2021
HAWTHORNE AB	1	1	1	5	1	2021
IQBAL TH	1	1	1	5	1	2021
KAMMERMEIER J	1	1	1	5	1	2021
KENNEDY NA	1	1	1	5	1	2021
KLONOFF DC	1	1	1	5	1	2021
LAMB CA	1	1	1	5	1	2021
LEES CW	1	1	1	5	1	2021
LI J	1	1	1	5	1	2021
LINDSAY JO	1	1	1	5	1	2021
MACDONALD J	1	1	1	5	1	2021
MCFARLANE M	1	1	1	5	1	2021
MEO AS	1	1	1	5	1	2021
MEO SA	1	1	1	5	1	2021
MIZUKI N	1	1	1	5	1	2021
MORAN GW	1	1	1	5	1	2021
NORTON C	1	1	1	5	1	2021
OKUDA K	1	1	1	5	1	2021
PANG Z	1	1	1	5	1	2021
PARKES M	1	1	1	5	1	2021
POWELL N	1	1	1	5	1	2021
QURAISHI N	1	1	1	5	1	2021
RADFORD S	1	1	1	5	1	2021
RAINE T	1	1	1	5	1	2021
RAMDEEN M	1	1	1	5	1	2021
SAGAR P	1	1	1	5	1	2021
SEBASTIAN S	1	1	1	5	1	2021
SEGAL JP	1	1	1	5	1	2021
SELINGER CP	1	1	1	5	1	2021
SHIMADA M	1	1	1	5	1	2021
SMITH PJ	1	1	1	5	1	2021
SPEIGHT RA	1	1	1	5	1	2021
STEED H	1	1	1	5	1	2021
SUBRAMANIAN S	1	1	1	5	1	2021
URA T	1	1	1	5	1	2021
WAKEMAN R	1	1	1	5	1	2021
YAMASHITA A	1	1	1	5	1	2021
ZHU Y	1	1	1	5	1	2021
KNUTSEN-LARSON S	1	2	1	4	2	2021
MUNAVALLI GG	1	2	1	4	2	2021
BADOWSKI ME	1	1	1	4	1	2021
BURGOS RM	1	1	1	4	1	2021
CHAKRABORTY S	1	1	1	4	1	2021
DRWIEGA E	1	1	1	4	1	2021
GHASSEMI S	1	1	1	4	1	2021
GONZLEZ EV	1	1	1	4	1	2021
GRIFFITH N	1	1	1	4	1	2021
GRIMALDOS AB	1	1	1	4	1	2021
GUNASEKARAN B	1	1	0.5	4	1	2020
HERALD F	1	1	1	4	1	2021
JAZAYERI SD	1	1	1	4	1	2021
JOHNSON M	1	1	1	4	1	2021
KHURANA N	1	1	0.5	4	1	2020
KYRIAKIDIS NC	1	1	1	4	1	2021
LI DD	1	1	1	4	1	2021
LI QH	1	1	1	4	1	2021
LIM HX	1	1	1	4	1	2021
LIM J	1	1	1	4	1	2021
LPEZ-CORTS A	1	1	1	4	1	2021
MALLAJOSYULA V	1	1	1	4	1	2021
MICHIENZI SM	1	1	1	4	1	2021
POH CL	1	1	1	4	1	2021
POPPEMA S	1	1	1	4	1	2021
PRADO EO	1	1	1	4	1	2021
RHODES A	1	1	0.5	4	1	2020

Author	h_index	g_index	m_index	TC	NP	Year
SALVAMANI S	1	1	0.5	4	1	2020
SHARMA M	1	1	0.5	4	1	2020
SMITH RO	1	1	1	4	1	2021
TAN GS	1	1	1	4	1	2021
TAN HZ	1	1	0.5	4	1	2020
TATO CM	1	1	1	4	1	2021
TER HC	1	1	0.5	4	1	2020
THANG WJ	1	1	0.5	4	1	2020
VYAS M	1	1	0.5	4	1	2020
WAN MS	1	1	0.5	4	1	2020
WANG TT	1	1	1	4	1	2021
CALABRESE C	1	1	1	3	2	2021
LEBWOHL M	1	1	1	3	2	2021
ALDOSARI BN	1	1	1	3	1	2021
ALFAGIH IM	1	1	1	3	1	2021
ALMURSHEDI AS	1	1	1	3	1	2021
ANESI GL	1	1	1	3	1	2021
ARMSTRONG AW	1	1	1	3	1	2021
BAKHIET M	1	1	1	3	1	2021
BELL S	1	1	1	3	1	2021
BLAUVELT A	1	1	1	3	1	2021
BRODSKY A	1	1	1	3	1	2021
CHU L	1	1	1	3	1	2021
DOMMASCH ED	1	1	1	3	1	2021
DUBE T	1	1	1	3	1	2021
DUTTA AK	1	1	0.5	3	1	2020
ELLEBRECHT CT	1	1	1	3	1	2021
FALK R	1	1	1	3	1	2021
FELDMAN SR	1	1	1	3	1	2021
FENNER J	1	1	1	3	1	2021
FISCHER W	1	1	1	3	1	2021
GELFAND JM	1	1	1	3	1	2021
GHOSH A	1	1	1	3	1	2021
GLADMAN D	1	1	1	3	1	2021
GLENN DA	1	1	1	3	1	2021
GLENN GM	1	1	1	3	1	2021
GNANAKARAN S	1	1	1	3	1	2021
GONDO G	1	1	1	3	1	2021
GUTHRIDGE R	1	1	1	3	1	2021
HAYNES BF	1	1	1	3	1	2021
HEGDE A	1	1	1	3	1	2021
HENGARTNER N	1	1	1	3	1	2021
HEYDON S	1	1	1	3	1	2021
HUANG W	1	1	1	3	1	2021
KIRCIK L	1	1	1	3	1	2021
KOMPELLA UB	1	1	1	3	1	2021
KOONS S	1	1	1	3	1	2021
KORBER B	1	1	1	3	1	2021
KOTZEN E	1	1	1	3	1	2021
KSHIRSAGAR AV	1	1	1	3	1	2021
LANDAU M	1	1	1	3	1	2021
LI D	1	1	1	3	1	2021
LIN CJ	1	1	0.5	3	1	2020
LO RE III	1	1	1	3	1	2021
MANN DL	1	1	0.5	3	1	2020
MARTIN G	1	1	1	3	1	2021
MATTHEW E	1	1	1	3	1	2021
MCDANAL C	1	1	1	3	1	2021
MCPHEE R	1	1	1	3	1	2021
MECHAM RP	1	1	0.5	3	1	2020
MENDONA M	1	1	1	3	1	2021
MEROLA JF	1	1	1	3	1	2021
MISHRA J	1	1	1	3	1	2021
MOGHIMI SM	1	1	1	3	1	2021
MONTEFIORI DC	1	1	1	3	1	2021
MOREIRA GMSG	1	1	1	3	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
MOTTL A	1	1	1	3	1	2021
NESTOROVA B	1	1	1	3	1	2021
OCON A	1	1	1	3	1	2021
PANDA JJ	1	1	1	3	1	2021
RITCHLIN CT	1	1	1	3	1	2021
SANDERS KO	1	1	1	3	1	2021
SCHER JU	1	1	1	3	1	2021
SCHWARTZMAN S	1	1	1	3	1	2021
SHEN X	1	1	1	3	1	2021
SILVEIRA MM	1	1	1	3	1	2021
SMITH G	1	1	1	3	1	2021
SYED MN	1	1	1	3	1	2021
TANG H	1	1	1	3	1	2021
TAURIN S	1	1	1	3	1	2021
THEILER J	1	1	1	3	1	2021
TREAT JR	1	1	1	3	1	2021
VAN VOORHEES AS	1	1	1	3	1	2021
WAGH K	1	1	1	3	1	2021
WALTER EB	1	1	1	3	1	2021
WEINSTEIN EJ	1	1	1	3	1	2021
YOON H	1	1	1	3	1	2021
NOVAK N	1	1	1	2	2	2021
ABBAS S	1	1	0.5	2	1	2020
ABDULLAHI H	1	1	1	2	1	2021
ADELMAN MW	1	1	1	2	1	2021
AFJAL A	1	1	0.5	2	1	2020
AGARWAL S	1	1	1	2	1	2021
AHMED R	1	1	1	2	1	2021
ALJABALI AAA	1	1	1	2	1	2021
ALMUTARY AG	1	1	1	2	1	2021
ALNUQAYDAN AM	1	1	1	2	1	2021
ANKERMANN T	1	1	1	2	1	2021
AYATOLLAHI J	1	1	1	2	1	2021
BABIKER A	1	1	1	2	1	2021
BAKSHI HA	1	1	1	2	1	2021
BERGMANN KC	1	1	1	2	1	2021
BEYDOUN N	1	1	1	2	1	2021
BHADADA SK	1	1	1	2	1	2021
BHARGAVA B	1	1	1	2	1	2021
BILAL S	1	1	0.5	2	1	2020
BREHLER R	1	1	1	2	1	2021
BROCKOW K	1	1	1	2	1	2021
BYRAM R	1	1	1	2	1	2021
CASPER I	1	1	1	2	1	2021
CHARBE N	1	1	1	2	1	2021
CHAUDHRY SN	1	1	0.5	2	1	2020
CHILAMAKURI R	1	1	1	2	1	2021
DAVIS-GARDNER ME	1	1	1	2	1	2021
ECKRICH J	1	1	1	2	1	2021
EDUPUGANTI S	1	1	1	2	1	2021
FINEMAN R	1	1	1	2	1	2021
GOMES DN	1	1	1	2	1	2021
GUPTA N	1	1	1	2	1	2021
HAGEMANN J	1	1	1	2	1	2021
HALEEM A	1	1	0.5	2	1	2020
HAMELMANN E	1	1	1	2	1	2021
HARTMANN K	1	1	1	2	1	2021
HAZAFA A	1	1	0.5	2	1	2020
HELLMEISTER K	1	1	1	2	1	2021
HTZENECKER W	1	1	1	2	1	2021
HUDSON WH	1	1	1	2	1	2021
HUPPERTZ J	1	1	1	2	1	2021
JAKOB T	1	1	1	2	1	2021
JAVAID M	1	1	0.5	2	1	2020
JENSEN-JAROLIM E	1	1	1	2	1	2021
JHA NK	1	1	1	2	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
KAINAAT A	1	1	0.5	2	1	2020
KALSOOM U	1	1	0.5	2	1	2020
KATARI NK	1	1	1	2	1	2021
KHAN KS	1	1	1	2	1	2021
KLEINHENZ J	1	1	1	2	1	2021
LAI L	1	1	1	2	1	2021
LE TK	1	1	1	2	1	2021
LOTFI M	1	1	1	2	1	2021
MAHLER V	1	1	1	2	1	2021
MAHROSH HS	1	1	1	2	1	2021
MANTUS G	1	1	1	2	1	2021
MCNAIR N	1	1	1	2	1	2021
MERK H	1	1	1	2	1	2021
MICHAEL G	1	1	1	2	1	2021
MISHRA V	1	1	1	2	1	2021
MISRA A	1	1	1	2	1	2021
MOHANDAS S	1	1	1	2	1	2021
MUKHOPADHYAY L	1	1	1	2	1	2021
MUMTAZ M	1	1	0.5	2	1	2020
MUSTAFA G	1	1	1	2	1	2021
NG WL	1	1	1	2	1	2021
NORWOOD C	1	1	1	2	1	2021
NYHOFF LE	1	1	1	2	1	2021
O'KEEFE JB	1	1	1	2	1	2021
PAL R	1	1	1	2	1	2021
PANDA S	1	1	1	2	1	2021
PANGANIBAN B	1	1	1	2	1	2021
PARIS C	1	1	1	2	1	2021
PATEL S	1	1	1	2	1	2021
PATIL D	1	1	1	2	1	2021
PFTZNER W	1	1	1	2	1	2021
PIANTADOSI A	1	1	1	2	1	2021
PITTS J	1	1	1	2	1	2021
RAB S	1	1	0.5	2	1	2020
RING J	1	1	1	2	1	2021
ROBSON F	1	1	1	2	1	2021
ROCCHI P	1	1	1	2	1	2021
SCHMIDT S	1	1	1	2	1	2021
SHAHCHERAGHI SH	1	1	1	2	1	2021
SHETE-AICH A	1	1	1	2	1	2021
SHUKLA SD	1	1	1	2	1	2021
SIDDIQUE A	1	1	0.5	2	1	2020
STEPHENS DS	1	1	1	2	1	2021
TAMBUWALA MM	1	1	1	2	1	2021
TAN Y	1	1	1	2	1	2021
TANG F	1	1	1	2	1	2021
UNTERSMAYR E	1	1	1	2	1	2021
USHER J	1	1	1	2	1	2021
VAISHYA R	1	1	0.5	2	1	2020
WAGGONER JJ	1	1	1	2	1	2021
WINTERS J	1	1	1	2	1	2021
WRAMMERT J	1	1	1	2	1	2021
XIA X	1	1	1	2	1	2021
YADAV P	1	1	1	2	1	2021
ZAFAR A	1	1	0.5	2	1	2020
ZAFAR N	1	1	0.5	2	1	2020
ZUBERBIER T	1	1	1	2	1	2021
CHAKER AM	1	1	1	1	2	2021
CUEVAS M	1	1	1	1	2	2021
SINGH V	1	1	0.5	1	2	2020
TEO SP	1	1	1	1	2	2021
ABU-IZNEID T	1	1	1	1	1	2021
AGMON-LEVIN N	1	1	1	1	1	2021
AL-BALUSHI K	1	1	1	1	1	2021
ALHAJRI N	1	1	1	1	1	2021
ASHRAF M	1	1	1	1	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
ASHRAF MU	1	1	1	1	1	2021
BAE YS	1	1	1	1	1	2021
BALIGA S	1	1	0.5	1	1	2020
BANDERA A	1	1	1	1	1	2021
BANERJEE M	1	1	1	1	1	2021
BARAB F	1	1	1	1	1	2021
BELETE TM	1	1	1	1	1	2021
BERTRAND N	1	1	1	1	1	2021
BIJL M	1	1	1	1	1	2021
BISSERIER M	1	1	1	1	1	2021
BOZZI G	1	1	1	1	1	2021
BROJAKOWSKA A	1	1	1	1	1	2021
CARETHERS JM	1	1	1	1	1	2021
CASTELLI V	1	1	1	1	1	2021
CHENNAIAHGARI N	1	1	1	1	1	2021
COTOFANA S	1	1	1	1	1	2021
DAVIDOVIC K	1	1	1	1	1	2021
DE SMEDT SC	1	1	1	1	1	2021
DE THURAH A	1	1	1	1	1	2021
DEFRNE J	1	1	1	1	1	2021
DEVA PRIYA SA	1	1	1	1	1	2021
DEWITTE H	1	1	1	1	1	2021
DHINGRA GA	1	1	0.5	1	1	2020
ELKAYAM O	1	1	1	1	1	2021
ENTEZARI-MALEKI T	1	1	1	1	1	2021
ESKANDARI A	1	1	1	1	1	2021
FERRARIZ TS	1	1	1	1	1	2021
FISH K	1	1	1	1	1	2021
FRANK K	1	1	1	1	1	2021
FURER V	1	1	1	1	1	2021
GAJULA V	1	1	1	1	1	2021
GEORGE M	1	1	1	1	1	2021
GERONEMUS RG	1	1	1	1	1	2021
GHANNAM S	1	1	1	1	1	2021
GORI A	1	1	1	1	1	2021
GOTKIN RH	1	1	1	1	1	2021
GOUKASSIAN DA	1	1	1	1	1	2021
GOUT U	1	1	1	1	1	2021
HADRI L	1	1	1	1	1	2021
HAMOUCHE W	1	1	1	1	1	2021
HAMROUNI AM	1	1	1	1	1	2021
HEXSEL D	1	1	1	1	1	2021
HYDER POTTOO F	1	1	1	1	1	2021
JANAGAMA R	1	1	1	1	1	2021
KADALI RAK	1	1	1	1	1	2021
KAPETANOVIC MC	1	1	1	1	1	2021
KAVITHA S	1	1	1	1	1	2021
KHAN SA	1	1	1	1	1	2021
KHANI E	1	1	1	1	1	2021
KHIALI S	1	1	1	1	1	2021
KHUBCHANDANI M	1	1	0.5	1	1	2020
KIM Y	1	1	1	1	1	2021
KUMAR S	1	1	1	1	1	2021
LENTACKER I	1	1	1	1	1	2021
LI T	1	1	1	1	1	2021
LIMA EM	1	1	1	1	1	2021
LOMBARDI A	1	1	1	1	1	2021
LUPO MP	1	1	1	1	1	2021
MADATHALA RR	1	1	1	1	1	2021
MAJUMDER J	1	1	1	1	1	2021
MALAYALA SV	1	1	1	1	1	2021
MAMAN P	1	1	0.5	1	1	2020
MANGIONI D	1	1	1	1	1	2021
MCHUGH TD	1	1	0.5	1	1	2020
MEHTA J	1	1	0.5	1	1	2020
MINKO T	1	1	1	1	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
MOHAMMAD IBRAHIM A	1	1	1	1	1	2021
MOHITE V	1	1	0.5	1	1	2020
MUELLER-LADNER U	1	1	1	1	1	2021
MUSCATELLO A	1	1	1	1	1	2021
MUSTAFA AS	1	1	0.5	1	1	2020
NAGPAL M	1	1	0.5	1	1	2020
NOUSHAD JAVED M	1	1	1	1	1	2021
PARAN D	1	1	1	1	1	2021
PERURU S	1	1	1	1	1	2021
PIANSAY-SORIANO ME	1	1	1	1	1	2021
PURI V	1	1	0.5	1	1	2020
RATHI N	1	1	0.5	1	1	2020
RONDAAN C	1	1	1	1	1	2021
ROSSI E	1	1	1	1	1	2021
ROUSSEL S	1	1	1	1	1	2021
SAFAR HA	1	1	0.5	1	1	2020
SARNOFF DS	1	1	1	1	1	2021
SATTLER S	1	1	1	1	1	2021
SCHREIBER K	1	1	1	1	1	2021
SEO D	1	1	1	1	1	2021
SHARMA A	1	1	0.5	1	1	2020
SHUKLA AK	1	1	1	1	1	2021
SINGH M	1	1	0.5	1	1	2020
SOLEIMANPOUR S	1	1	1	1	1	2021
SRIRAM DK	1	1	1	1	1	2021
SRIVASTAVA R	1	1	0.5	1	1	2020
THOSAR N	1	1	0.5	1	1	2020
UNGARO R	1	1	1	1	1	2021
VAN ASSEN S	1	1	1	1	1	2021
VENUGOPAL P	1	1	1	1	1	2021
VERBEKE R	1	1	1	1	1	2021
VIANA IMDO	1	1	1	1	1	2021
VILLA S	1	1	1	1	1	2021
WANITPHAKDEEDECHA R	1	1	1	1	1	2021
WARNATZ K	1	1	1	1	1	2021
WAYKAR R	1	1	0.5	1	1	2020
WU Z	1	1	1	1	1	2021
WULFFRAAT NM	1	1	1	1	1	2021
YAGHOUBI A	1	1	1	1	1	2021
ABRAMS EM	0	0	0	0	1	2021
ABU-MUCH A	0	0	0	0	1	2021
AL-SHARI NA	0	0	0	0	1	2021
ALCALAY R	0	0	0	0	1	2021
ALEJANDRIA MM	0	0	0	0	1	2021
ALIBERTI S	0	0	0	0	1	2021
ALJINOVI-VUI V	0	0	0	0	1	2020
ALTMANN DM	0	0	0	0	1	2021
AMATI F	0	0	0	0	1	2021
AMITAL H	0	0	0	0	1	2021
ANAGNOSTIS P	0	0	0	0	1	2021
ANDERSON KS	0	0	0	0	1	2021
ARDAN R	0	0	0	0	1	2021
ARDIZZONE S	0	0	0	0	1	2021
ASKANASE AD	0	0	0	0	1	2021
ASNSOLO A	0	0	0	0	1	2021
BARAJAS-NAVA LA	0	0	0	0	1	2021
BELL MR	0	0	0	0	1	2021
BENUCCI M	0	0	0	0	1	2021
BESA JJV	0	0	0	0	1	2021
BHARADWAJ A	0	0	0	0	1	2020
BHUIYA EH	0	0	0	0	1	2021
BLASI F	0	0	0	0	1	2021
BLOEM BR	0	0	0	0	1	2021
BONIFAZ LC	0	0	0	0	1	2020
BORAH P	0	0	0	0	1	2021
BOYTON RJ	0	0	0	0	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
BRAGA L	0	0	0	0	1	2021
BRAGAZZI NL	0	0	0	0	1	2021
BRAVO C	0	0	0	0	1	2021
BRIDGEWOOD C	0	0	0	0	1	2021
BRODAVKA M	0	0	0	0	1	2021
BROWN CL	0	0	0	0	1	2021
BROWN RB	0	0	0	0	1	2021
BRUNDIN P	0	0	0	0	1	2021
BUJAN J	0	0	0	0	1	2021
CABANILLAS B	0	0	0	0	1	2021
CABRAL BP	0	0	0	0	1	2021
CALABRESE L	0	0	0	0	1	2021
CALZETTA L	0	0	0	0	1	2021
CANNATELLI R	0	0	0	0	1	2021
CARMAGNOLA S	0	0	0	0	1	2021
CARPENTER PA	0	0	0	0	1	2021
CHANDRASEKARAN B	0	0	0	0	1	2021
CHATZIMICHAEL E	0	0	0	0	1	2021
CHATZISTEFANOU I	0	0	0	0	1	2021
CHAUDHARY D	0	0	0	0	1	2020
CHIANG HL	0	0	0	0	1	2021
CHOPRA A	0	0	0	0	1	2021
CHOWDHURY AAM	0	0	0	0	1	2021
CIRIONI O	0	0	0	0	1	2021
CLEMENTI E	0	0	0	0	1	2021
COHEN Y	0	0	0	0	1	2021
COPPOLA A	0	0	0	0	1	2021
CORTI C	0	0	0	0	1	2021
CRIMINI E	0	0	0	0	1	2021
CRUZ-DVALOS I	0	0	0	0	1	2020
CURIGLIANO G	0	0	0	0	1	2021
DAHABIYEH LA	0	0	0	0	1	2021
DALMAT YM	0	0	0	0	1	2021
DANELLI P	0	0	0	0	1	2021
DANS LF	0	0	0	0	1	2021
DE LEN-LUIS JA	0	0	0	0	1	2021
DE LEN-RODRGUEZ SG	0	0	0	0	1	2020
DE MARCO G	0	0	0	0	1	2021
DEB PK	0	0	0	0	1	2021
DEKA S	0	0	0	0	1	2021
DELALOGE S	0	0	0	0	1	2021
DERRICO MM	0	0	0	0	1	2021
DEVI GC	0	0	0	0	1	2021
DHAR R	0	0	0	0	1	2021
DI DANIELE T	0	0	0	0	1	2021
DILILLO D	0	0	0	0	1	2021
DIOTALLEVI F	0	0	0	0	1	2021
DOULBERIS M	0	0	0	0	1	2021
DRUYAN A	0	0	0	0	1	2021
DU-ILNICKA I	0	0	0	0	1	2021
DUBHASHI SP	0	0	0	0	1	2020
EGGERMONT AMM	0	0	0	0	1	2021
ELBAHRI M	0	0	0	0	1	2021
ELHIJA MA	0	0	0	0	1	2021
ELIAS M	0	0	0	0	1	2021
ELTITY M	0	0	0	0	1	2021
ENYEW EF	0	0	0	0	1	2021
FERRETTI F	0	0	0	0	1	2021
FIORINA P	0	0	0	0	1	2021
FISHMAN M	0	0	0	0	1	2021
FOCOSI D	0	0	0	0	1	2021
FRAILE-MARTNEZ O	0	0	0	0	1	2021
FRANCIS CP	0	0	0	0	1	2021
GALLI M	0	0	0	0	1	2021
GALLIENI M	0	0	0	0	1	2021
GARCA-HONDUVILLA N	0	0	0	0	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
GARCA-MONTERO C	0	0	0	0	1	2021
GEL E	0	0	0	0	1	2021
GENOVESE G	0	0	0	0	1	2021
GERSHMAN J	0	0	0	0	1	2020
GIALAMPRINOU D	0	0	0	0	1	2021
GIASSON BI	0	0	0	0	1	2021
GIORGI V	0	0	0	0	1	2021
GKOLIA I	0	0	0	0	1	2021
GMEZ-LAHOZ AM	0	0	0	0	1	2021
GOETZ C	0	0	0	0	1	2021
GOLDE TE	0	0	0	0	1	2021
GORDON M	0	0	0	0	1	2021
GRAMEGNA A	0	0	0	0	1	2021
GREENHAWT M	0	0	0	0	1	2021
GUERRA F	0	0	0	0	1	2021
GUIJARRO LG	0	0	0	0	1	2021
GUPTA MS	0	0	0	0	1	2021
HADDAD A	0	0	0	0	1	2021
HASAN M	0	0	0	0	1	2021
HASAN MT	0	0	0	0	1	2021
HE W	0	0	0	0	1	2021
HERNNDEZ-RICO B	0	0	0	0	1	2020
HIJAZI N	0	0	0	0	1	2021
HILL JA	0	0	0	0	1	2021
HUENGES B	0	0	0	0	1	2021
HUNTER BR	0	0	0	0	1	2021
HUSSAIN MA	0	0	0	0	1	2021
HUSSAIN S	0	0	0	0	1	2021
IMIDS STUDY GROUP IMIDSG	0	0	0	0	1	2021
INVERNIZZI A	0	0	0	0	1	2021
JANG WJ	0	0	0	0	1	2021
JANISZEWSKA-OLSZOWSKA J	0	0	0	0	1	2021
JARADAT DMM	0	0	0	0	1	2021
JEDLISKI M	0	0	0	0	1	2021
JEE B	0	0	0	0	1	2021
JOHNSON JC	0	0	0	0	1	2021
JOHNSON PA	0	0	0	0	1	2021
KAFAFYLLIDOU K	0	0	0	0	1	2021
KALIA LV	0	0	0	0	1	2021
KAMBLE PH	0	0	0	0	1	2020
KANG UJ	0	0	0	0	1	2021
KANT R	0	0	0	0	1	2021
KARMAKAR S	0	0	0	0	1	2021
KHALILI L	0	0	0	0	1	2021
KIFLE ZD	0	0	0	0	1	2021
KINGSLEY TC	0	0	0	0	1	2021
KIRBAS H	0	0	0	0	1	2021
KOTRONIS G	0	0	0	0	1	2021
KOUNTOURAS J	0	0	0	0	1	2021
KREMERS W	0	0	0	0	1	2021
KRISHNAMURTHY B	0	0	0	0	1	2021
KRUMM ZA	0	0	0	0	1	2021
KUDERER NM	0	0	0	0	1	2021
KUMAR TP	0	0	0	0	1	2021
KUTZLER M	0	0	0	0	1	2021
KWON HJ	0	0	0	0	1	2021
KYRIAKOPOULOS A	0	0	0	0	1	2021
LANGEVITZ P	0	0	0	0	1	2021
LAPITAN MCM	0	0	0	0	1	2021
LEE EW	0	0	0	0	1	2021
LI R	0	0	0	0	1	2021
LIATSOS C	0	0	0	0	1	2021
LIDAR M	0	0	0	0	1	2021
LIU G	0	0	0	0	1	2021
LLOYD GM	0	0	0	0	1	2021
LUZZI V	0	0	0	0	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
LVAREZ-MON M	0	0	0	0	1	2021
LVAREZ-MON MA	0	0	0	0	1	2021
LYMAN GH	0	0	0	0	1	2021
MACONI G	0	0	0	0	1	2021
MAECKA I	0	0	0	0	1	2021
MAGGI F	0	0	0	0	1	2021
MAHAJNA H	0	0	0	0	1	2021
MAIER JA	0	0	0	0	1	2021
MARASCA R	0	0	0	0	1	2021
MARCY J	0	0	0	0	1	2021
MARDON A	0	0	0	0	1	2021
MARZANO AV	0	0	0	0	1	2021
MARZO-ORTEGA H	0	0	0	0	1	2021
MATERA MG	0	0	0	0	1	2021
MAZUR M	0	0	0	0	1	2021
MCDONALD I	0	0	0	0	1	2021
MCGONAGLE D	0	0	0	0	1	2021
MCLORINAN J	0	0	0	0	1	2021
MEKURIA AB	0	0	0	0	1	2021
MERRILL JT	0	0	0	0	1	2021
MITCHELL DA	0	0	0	0	1	2021
MITCHELL O	0	0	0	0	1	2021
MOLINELLI E	0	0	0	0	1	2021
MONSERRAT J	0	0	0	0	1	2021
MORPURGO PS	0	0	0	0	1	2021
MOSSELHY DA	0	0	0	0	1	2021
MOTA F	0	0	0	0	1	2021
MURRAY SM	0	0	0	0	1	2021
NA NA	0	0	0	0	1	2021
NAFFAA ME	0	0	0	0	1	2021
NASIF LH	0	0	0	0	1	2021
NDOKAJ A	0	0	0	0	1	2021
NEBULONI M	0	0	0	0	1	2021
NIAFAS D	0	0	0	0	1	2021
NTONA S	0	0	0	0	1	2021
O'HORO JC	0	0	0	0	1	2021
OFFIDANI A	0	0	0	0	1	2021
OLMO-VZQUEZ GD	0	0	0	0	1	2020
ORTEGA MA	0	0	0	0	1	2021
OTTOLENGHI L	0	0	0	0	1	2021
PAN Y	0	0	0	0	1	2021
PAPA SM	0	0	0	0	1	2021
PAPAEFTHYMIOU A	0	0	0	0	1	2021
PAPAMICHOS S	0	0	0	0	1	2021
PAPAZOGLOU DD	0	0	0	0	1	2021
PASUPATHY K	0	0	0	0	1	2021
POLIMENI A	0	0	0	0	1	2021
PONIEDZIAEK B	0	0	0	0	1	2021
PRAVETTONI G	0	0	0	0	1	2021
RADI G	0	0	0	0	1	2021
RADOVANOVIC D	0	0	0	0	1	2021
RADWAN-OCZKO M	0	0	0	0	1	2021
RASKAR R	0	0	0	0	1	2021
REYNOLDS CJ	0	0	0	0	1	2021
RITONDO BL	0	0	0	0	1	2021
RIVA A	0	0	0	0	1	2021
RIZZARDINI G	0	0	0	0	1	2021
RIZZETTO G	0	0	0	0	1	2021
ROGLIANI P	0	0	0	0	1	2021
ROMERO-BRUFAU S	0	0	0	0	1	2021
RUSK DS	0	0	0	0	1	2021
RYU AJ	0	0	0	0	1	2021
RZYMSKI P	0	0	0	0	1	2021
SABIU G	0	0	0	0	1	2021
SADERI L	0	0	0	0	1	2021
SANCHEZ-FERRO A	0	0	0	0	1	2021

Author	h_index	g_index	m_index	TC	NP	Year
SANCHEZ-TOLOSA MT	0	0	0	0	1	2021
SANCHEZ-TRUJILLO L	0	0	0	0	1	2021
SANTUS P	0	0	0	0	1	2021
SARZI-PUTTINI PC	0	0	0	0	1	2021
SAXENA A	0	0	0	0	1	2020
SEMENIN V	0	0	0	0	1	2021
SERRANO E	0	0	0	0	1	2021
SHAKER M	0	0	0	0	1	2021
SHARIFUZZAMAN SM	0	0	0	0	1	2021
SHIMABUKURO T	0	0	0	0	1	2021
SHINU P	0	0	0	0	1	2021
SHOENFELD Y	0	0	0	0	1	2021
SIMONETTI O	0	0	0	0	1	2021
SINGER AG	0	0	0	0	1	2021
SINGH A	0	0	0	0	1	2021
SIRONEN T	0	0	0	0	1	2021
SNMEZ S	0	0	0	0	1	2021
SOTERIADES ES	0	0	0	0	1	2021
SOTGIU G	0	0	0	0	1	2021
ST DENIS K	0	0	0	0	0	
STAURENGHI G	0	0	0	0	1	2021
STRACHAN CC	0	0	0	0	1	2021
STUKUS D	0	0	0	0	1	2021
SUBRAMANIAN J	0	0	0	0	1	2021
SUMON TA	0	0	0	0	1	2021
TANG W	0	0	0	0	1	2021
TARANTINO P	0	0	0	0	1	2021
TORRES-CARRANZA D	0	0	0	0	1	2021
TRENKWALDER C	0	0	0	0	1	2021
TSINONIS N	0	0	0	0	1	2021
ULJ RT	0	0	0	0	1	2020
VENUGOPALA KN	0	0	0	0	1	2021
VIRTANEN J	0	0	0	0	1	2021
VITAL E	0	0	0	0	1	2021
VOLLMAR HC	0	0	0	0	1	2021
VOZA A	0	0	0	0	1	2021
VOZZA I	0	0	0	0	1	2021
WAHI N	0	0	0	0	1	2020
WATAD A	0	0	0	0	1	2021
WATTENBERG D	0	0	0	0	1	2021
WEI N	0	0	0	0	1	2021
WILSON WR	0	0	0	0	1	2021
WYSOCKI J	0	0	0	0	1	2021
XI CE	0	0	0	0	1	2021
XIA Y	0	0	0	0	1	2021
YADAV UCS	0	0	0	0	1	2021
YUAN C	0	0	0	0	1	2021
ZEYLAND J	0	0	0	0	1	2021
ZIKOS P	0	0	0	0	1	2021
ZISMAN D	0	0	0	0	1	2021
ZUCCOTTI G	0	0	0	0	1	2021

Supplementary Table 2. The list of the top 100 most productive universities of organizations.

Affiliation	NoP
National Institutes of Health NIH	8
Moderna Therapeutics	8
National Institute of Allergy and Infectious Diseases NIAID	7
Emory University	6
Vanderbilt University Medical Center	6
Inserm	5
Emory University School of Medicine	5
Imperial College London	5
Brigham and Women's Hospital	5
Columbia University Irving Medical Center	5
McMaster University	5
Harvard Medical School	4

Affiliation	NoP
University of Pennsylvania	4
Icahn School of Medicine at Mount Sinai	4
Kaiser Permanente	4
The University of North Carolina at Chapel Hill	4
Massachusetts General Hospital	4
Università degli Studi di Milano	4
Emmes	3
International Medical University	3
The George Washington University	3
Maharshi Dayanand University	3
Duke University School of Medicine	3
Università degli Studi dell'Insubria	3
Ospedale Maggiore Policlinico Milano	3
Fudan University	3
University of Maryland School of Medicine	3
University of Washington	3
Technical University of Munich	3
The University of Sydney	3
The Children's Hospital of Philadelphia	3
University of California, San Diego	3
Wake Forest School of Medicine	3
Azienda Ospedaliera-Universitaria Pisana	3
Lovely Professional University	3
Dermatology	2
Journal of American Medical Association	2
University of Cape Town	2
Uniklinik RWTH Aachen	2
Mashhad University of Medical Sciences	2
University of the Free State, School of Medicine	2
Toronto Western Hospital University of Toronto	2
Baylor College of Medicine	2
Chinese University of Hong Kong	2
Fred Hutchinson Cancer Research Center	2
University of Pennsylvania Perelman School of Medicine	2
Arizona State University	2
Vanderbilt University	2
Hospital Universitario 12 de Octubre	2
Tel Aviv University, Sackler Faculty of Medicine	2
Mayo Clinic	2
Tel Aviv University	2
Newcastle University	2
Howard Hughes Medical Institute	2
The University of Arizona	2
Food and Drug Administration	2
The University of Newcastle, Australia	2
Sanford School of Medicine	2
Karolinska Institutet	2
Leeds Teaching Hospitals NHS Trust	2
Stanford University	2
King Saud University	2
Veterans General Hospital-Taipei	2
University of Tasmania	2
University of the Free State	2
Arizona State University Downtown Phoenix Campus	2
University of Toronto	2
Central South University	2
Justus-Liebig-Universität Gießen	2
Technische Universität Dresden	2
Indraprastha Apollo Hospitals	2
Imperial College Faculty of Medicine	2
University of Liverpool	2
Cleveland Clinic Foundation	2
AP-HP Assistance Publique - Hopitaux de Paris	2
Massachusetts Institute of Technology	2
Drexel University College of Medicine	2
University of Technology Sydney	2

Affiliation	NoP
NYU Grossman School of Medicine	2
Centre de Recherche en Cancerologie de Marseille	2
The George Washington University School of Medicine and Health Sciences	2
University of Michigan, Ann Arbor	2
Charité – Universitätsmedizin Berlin	2
University of Illinois at Chicago	2
University of Colorado Anschutz Medical Campus	2
Universitäts-Klinikum Bonn und Medizinische Fakultät	2
Universidade Federal de Pernambuco	2
Harvard T.H. Chan School of Public Health	2
Hospital General Universitario Gregorio Marañon	2
Shanghai Medical College Fudan University	2
Raja Isteri Pengiran Anak Saleha Hospital	2
Amity University, Noida	2
University of Gondar	2
Aix Marseille Université	2
Klinikum rechts der Isar der Technischen Universität München	2
Khalifa University of Science and Technology	2
University of Petroleum and Energy Studies	2
Suresh Gyan Vihar University	2
Zentrum Allergie und Umwelt	2
Sydney Medical School	2
Zhongnan Hospital of Wuhan University	2
Université de Paris	2
St. Luke's Hospital	1
Psychiatric Hospital of Thessaloniki	1
National Psoriasis Foundation	1
Zentrum für Rhinologie und Allergologie	1
Kinnaird College for Women	1
Benchmark Research	1
Whiteside Institute for Clinical Research	1
Academy of Medicine of Rio de Janeiro	1
Pakistan Air Force Hospital	1
Kakatiya Medical College	1
Johnson County Clin-Trials	1
Oregon Medical Research Center	1
Vaccine Research Center	1
Zentrum für Rhinologie und Allergologie	1
Quality of Life Medical and Research Center	1
Center for the AIDS Programme of Research in South Africa	1
Digestive Diseases Centre	1
University School of Medicine	1
Obesity and Cholesterol Foundation N-DOC	1
Weill Cornell Medicine	1
Research and Development Department	1
Vanderbilt Institute for Infection	1
ConscienHealth	1
NCRD’s Sterling Institute of Pharmacy	1
NEMA Research, Inc.	1
Mayo Clinic Health System	1
S. Giovanni di Dio Hospital	1
Faculty Anhanguera of Pelotas	1
Biomedical Network on Rare Diseases CIBERER	1
Zentrum für Rhinologie und Allergologie Wiesbaden	1
Agencija za Lijekove i Medicinske Proizvode HALMED	1
Fortis-C-DOC Centre of Excellence for Diabetes	1
424 General Military Training Hospital	1
Center for Rhinology and Allergology	1
University Hospital of Marseille	1
Departments of Pathology, Microbiology and Immunology	1
Sylhet Agricultural University	1
BMJ	1
Spanish Network on Mastocytosis REMA	1
Messerli Research Institute	1
Bonoi Academy of Science and Education	1
Kidzcare Pediatrics	1

Affiliation	NoP
Seattle Children's Research Institute	1
Rangamati General Hospital	1
International Radio Medical Centre C.I.R.M.	1
General Hospital Aghios Pavlos of Thessaloniki	1
OrthoEvidence Inc.	1
Suzhou Jukang New Materials Co. Ltd of Science and Technology	1
Dartmouth-Hitchcock Medical Center	1
Clinical Research Atlanta	1
EpicentRx Inc	1
International Scientific Information, Inc.	1
Ministry of Health and Prevention	1
Hospital Quironsalud Bizkaia	1
ASST Sette Laghi	1
Meridian Clinical Research	1
Health Promotion Area	1
Advanced Cancer Research Group	1

Supplementary Table 3. The list of countries involved in all publications.

COUNTRY	NoP
United States	74
India	30
United Kingdom	16
Germany	14
Canada	13
Italy	13
China	11
France	9
Spain	9
Australia	7
Saudi Arabia	7
Brazil	6
Malaysia	6
South Africa	6
Iran	4
Netherlands	4
Pakistan	4
Sweden	4
Austria	3
Belgium	3
Israel	3
Poland	3
Switzerland	3
Taiwan	3
Bangladesh	2
Brunei Darussalam	2
Czech Republic	2
Egypt	2
Ethiopia	2
Hong Kong	2
Japan	2
Jordan	2
Mexico	2
Oman	2
Portugal	2
Singapore	2
South Korea	2
United Arab Emirates	2
Bahrain	1
Bulgaria	1
Chile	1
Croatia	1
Cyprus	1
Denmark	1
Ecuador	1
Finland	1
Greece	1

COUNTRY	NoP
Kuwait	1
Lebanon	1
New Zealand	1
Philippines	1
Qatar	1
Sudan	1
Venezuela	1
Viet Nam	1
Undefined	18

Supplementary Table 4. The list of all 188 sources.

Source	h_index	g_index	m_index	TC	NP	Year
NEW ENGLAND JOURNAL OF MEDICINE	4	4	2	1341	4	2020
INTERNATIONAL JOURNAL OF ANTIMICROBIAL AGENTS	1	1	0.5	282	1	2020
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES	1	1	0.5	245	1	2020
NATURE	2	2	1	170	2	2020
VIRUSES	2	3	1	69	3	2020
MEDICAL SCIENCE MONITOR	1	1	0.5	65	1	2020
FRONTIERS IN IMMUNOLOGY	3	5	1.5	53	5	2020
MORBIDITY AND MORTALITY WEEKLY REPORT	3	3	3	52	3	2021
JOURNAL OF BONE AND JOINT SURGERY - AMERICAN VOLUME	1	1	0.5	52	1	2020
SIGNAL TRANSDUCTION AND TARGETED THERAPY	1	1	0.5	49	1	2020
PAEDIATRIC RESPIRATORY REVIEWS	1	1	0.5	46	1	2020
JOURNAL OF INFECTION AND PUBLIC HEALTH	1	2	0.5	34	2	2020
LIFE SCIENCES	2	3	1	31	3	2020
JOURNAL OF VIROLOGY	1	1	0.5	30	1	2020
BIOTECHNOLOGY JOURNAL	1	1	0.5	26	1	2020
JOURNAL OF CLINICAL AND EXPERIMENTAL HEPATOLOGY	1	1	0.5	18	1	2020
JOURNAL OF BIOSCIENCES	1	1	0.5	17	1	2020
NATURE REVIEWS MICROBIOLOGY	1	1	1	16	1	2021
MOLECULAR NEUROBIOLOGY	1	1	0.5	13	1	2020
ADVANCED HEALTHCARE MATERIALS	1	1	0.5	12	1	2020
ADVANCED DRUG DELIVERY REVIEWS	2	2	2	11	2	2021
CELL	1	1	1	11	1	2021
CLINICAL IMAGING	1	1	1	11	1	2021
ZHONGHUA YU FANG YI XUE ZA ZHI [CHINESE JOURNAL OF PREVENTIVE MEDICINE]	1	1	0.5	10	1	2020
ACTA TROPICA	1	1	1	9	1	2021
EUROPEAN JOURNAL OF PHARMACOLOGY	1	1	0.5	9	1	2020
JOURNAL OF PHARMACEUTICAL SCIENCES	1	1	1	9	1	2021
VACCINES	1	2	1	8	6	2021
VACCINE	2	2	2	8	2	2021
INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH	1	2	0.5	7	2	2020
JAMA - JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION	1	1	1	7	1	2021
JOURNAL OF NANOPARTICLE RESEARCH	1	1	0.5	7	1	2020
NATURE REVIEWS IMMUNOLOGY	1	1	1	6	1	2021
WORLD ALLERGY ORGANIZATION JOURNAL	1	1	1	6	1	2021
CELL HOST AND MICROBE	2	2	2	5	2	2021
ASIAN JOURNAL OF PHARMACEUTICAL SCIENCES	1	1	1	5	1	2021

Source	h_index	g_index	m_index	TC	NP	Year
EUROPEAN REVIEW FOR MEDICAL AND PHARMACOLOGICAL SCIENCES	1	1	1	5	1	2021
JOURNAL OF ORAL PATHOLOGY AND MEDICINE	1	1	1	5	1	2021
THE LANCET GASTROENTEROLOGY AND HEPATOLOGY	1	1	1	5	1	2021
DIABETES AND METABOLIC SYNDROME: CLINICAL RESEARCH AND REVIEWS	2	2	1	4	2	2020
NPJ VACCINES	1	2	1	4	2	2021
BIOMEDICAL JOURNAL	1	1	1	4	1	2021
BRITISH JOURNAL OF BIOMEDICAL SCIENCE	1	1	0.5	4	1	2020
DRUGS IN CONTEXT	1	1	1	4	1	2021
MEDICAL HYPOTHESES	1	1	0.5	4	1	2020
MILITARY MEDICAL RESEARCH	1	1	1	4	1	2021
ADVANCED THERAPEUTICS	1	1	1	3	1	2021
ARCHIVES OF DERMATOLOGICAL RESEARCH	1	1	1	3	1	2021
CYTOKINE AND GROWTH FACTOR REVIEWS	1	1	1	3	1	2021
INDIAN JOURNAL OF PEDIATRICS	1	1	0.5	3	1	2020
JACC: BASIC TO TRANSLATIONAL SCIENCE	1	1	0.5	3	1	2020
JOURNAL OF THE AMERICAN ACADEMY OF DERMATOLOGY	1	1	1	3	1	2021
KIDNEY INTERNATIONAL REPORTS	1	1	1	3	1	2021
MOLECULAR THERAPY	1	1	1	3	1	2021
PHARMACEUTICS	1	1	1	3	1	2021
ALLERGO JOURNAL INTERNATIONAL	1	1	1	2	1	2021
CELLS	1	1	1	2	1	2021
ENVIRONMENT, DEVELOPMENT AND SUSTAINABILITY	1	1	1	2	1	2021
INDIAN JOURNAL OF MEDICAL RESEARCH	1	1	1	2	1	2021
INTERNIST	1	1	1	2	1	2021
MEDICINAL RESEARCH REVIEWS	1	1	1	2	1	2021
THERAPEUTIC DELIVERY	1	1	1	2	1	2021
TRENDS IN BIOCHEMICAL SCIENCES	1	1	1	2	1	2021
JAAD CASE REPORTS	1	1	1	1	2	2021
JOURNAL OF MEDICAL VIROLOGY	1	1	1	1	2	2021
LARYNGO- RHINO- OTOLOGIE	1	1	1	1	2	2021
AAPS JOURNAL	1	1	1	1	1	2021
ACTA PHARMACEUTICA SINICA B	1	1	1	1	1	2021
ANNALS OF CLINICAL MICROBIOLOGY AND ANTIMICROBIALS	1	1	0.5	1	1	2020
ANNALS OF GERIATRIC MEDICINE AND RESEARCH	1	1	1	1	1	2021
CLINICAL DRUG INVESTIGATION	1	1	1	1	1	2021
EXPERT REVIEW OF VACCINES	1	1	1	1	1	2021
HIGH BLOOD PRESSURE AND CARDIOVASCULAR PREVENTION	1	1	1	1	1	2021
INFECTION AND DRUG RESISTANCE	1	1	1	1	1	2021
INTERNATIONAL JOURNAL OF APPLIED PHARMACEUTICS	1	1	0.5	1	1	2020
INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACEUTICAL SCIENCES	1	1	0.5	1	1	2020
JCI INSIGHT	1	1	1	1	1	2021
JOURNAL OF CLINICAL PHARMACOLOGY	1	1	1	1	1	2021
JOURNAL OF CONTROLLED RELEASE	1	1	1	1	1	2021
JOURNAL OF DRUGS IN DERMATOLOGY : JDD	1	1	1	1	1	2021
JOURNAL OF MOLECULAR AND CELLULAR CARDIOLOGY	1	1	1	1	1	2021
PHARMACEUTICAL RESEARCH	1	1	1	1	1	2021

Source	h_index	g_index	m_index	TC	NP	Year
RMD OPEN	1	1	1	1	1	2021
SAUDI PHARMACEUTICAL JOURNAL	1	1	1	1	1	2021
BOLETIN MEDICO DEL HOSPITAL INFANTIL DE MEXICO	0	0	0	0	2	2020
FRONTIERS IN MOLECULAR BIOSCIENCES	0	0	0	0	2	2021
MEDICINA (LITHUANIA)	0	0	0	0	2	2021
ACTA MEDICA PHILIPPINA	0	0	0	0	1	2021
ALLERGOLOGY INTERNATIONAL	0	0	0	0	1	2021
AMERICAN JOURNAL OF TRANSPLANTATION	0	0	0	0	1	2021
CANCER INVESTIGATION	0	0	0	0	1	2021
CURRENT OPINION IN PEDIATRICS	0	0	0	0	1	2021
DRUG DEVELOPMENT AND INDUSTRIAL PHARMACY	0	0	0	0	1	2021
DRUG TOPICS	0	0	0	0	1	2020
EUROPEAN JOURNAL OF CANCER	0	0	0	0	1	2021
FARMACEUTSKI GLASNIK	0	0	0	0	1	2020
FRONTIERS IN PHARMACOLOGY	0	0	0	0	1	2021
GEROSCIENCE	0	0	0	0	1	2021
HEALTHCARE (SWITZERLAND)	0	0	0	0	1	2021
HUMAN VACCINES AND IMMUNOTHERAPEUTICS	0	0	0	0	1	2021
INDIAN JOURNAL OF PHARMACEUTICAL EDUCATION AND RESEARCH	0	0	0	0	1	2021
JMIR PUBLIC HEALTH AND SURVEILLANCE	0	0	0	0	1	2021
JOURNAL OF EVIDENCE-BASED INTEGRATIVE MEDICINE	0	0	0	0	1	2021
JOURNAL OF PARKINSON'S DISEASE	0	0	0	0	1	2021
JOURNAL OF PHARMACY PRACTICE	0	0	0	0	1	2021
JOURNAL OF PURE AND APPLIED MICROBIOLOGY	0	0	0	0	1	2020
LUPUS SCIENCE AND MEDICINE	0	0	0	0	1	2021
MMW-FORTSCHRITTE DER MEDIZIN	0	0	0	0	1	2021
NANOMATERIALS	0	0	0	0	1	2021
OPTION/BIO	0	0	0	0	1	2021
PAN AFRICAN MEDICAL JOURNAL	0	0	0	0	1	2020
RESPIRATORY MEDICINE	0	0	0	0	1	2021
REVIEWS IN MEDICAL VIROLOGY	0	0	0	0	1	2021
RISK MANAGEMENT AND HEALTHCARE POLICY	0	0	0	0	1	2021
THE BMJ	0	0	0	0	1	2021
UNIVERSITY OF TORONTO MEDICAL JOURNAL	0	0	0	0	1	2021
VIROLOGY JOURNAL	0	0	0	0	1	2021
VIRUSDISEASE	0	0	0	0	1	2021

Supplementary Table 5. The list of top 100 sponsors.

FOUNDING SPONSOR	NoP
National Institutes of Health	25
National Institute of Allergy and Infectious Diseases	15
Pfizer	8
U.S. Department of Health and Human Services	8
Biomedical Advanced Research and Development Authority	6
Eli Lilly and Company	6
Gilead Sciences	5
Amgen	4
AstraZeneca	4
Coalition for Epidemic Preparedness Innovations	4

FOUNDING SPONSOR	NoP
Merck	4
National Natural Science Foundation of China	4
AbbVie	3
GlaxoSmithKline	3
National Center for Advancing Translational Sciences	3
Novartis	3
Vaccine Research Center	3
Vanderbilt University Medical Center	3
Bill and Melinda Gates Foundation	2
Bristol-Myers Squibb	2
Burroughs Wellcome Fund	2
Drexel University	2
European Commission	2
European Regional Development Fund	2
Instituto de Salud Carlos III	2
Janssen Pharmaceuticals	2
Korea Health Industry Development Institute	2
Medical Research Council	2
Ministry of Health and Welfare	2
National Institute for Health Research	2
Office of the Assistant Secretary for Health	2
Roche	2
Samsung	2
Takeda Pharmaceuticals U.S.A.	2
UK Research and Innovation	2
Agency for Healthcare Research and Quality	1
Alabama Agricultural Experiment Station	1
Allergan	1
Allergopharma	1
American Heart Association	1
Animal Health Australia	1
Australian Research Council	1
Baylor College of Medicine	1
Biogen	1
Boehringer Ingelheim	1
Canada Foundation for Innovation	1
Celgene	1
Centers for Disease Control and Prevention	1
Changsha Science and Technology Project	1
Charles H. Hood Foundation	1
Chiesi Farmaceutici	1
Children's Healthcare of Atlanta	1
Chinese University of Hong Kong	1
Chugai Pharmaceutical	1
Cidara Therapeutics	1
Conselho Nacional de Desenvolvimento Científico e Tecnológico	1

FOUNDING SPONSOR	NoP
Croucher Foundation	1
Deanship of Scientific Research, King Saud University	1
Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, India	1
Department of Education and Training	1
Department of Health and Social Care	1
Department of Health, Australian Government	1
Deutsche Forschungsgemeinschaft	1
Division of Intramural Research, National Institute of Allergy and Infectious Diseases	1
Division of Microbiology and Infectious Diseases, National Institute of Allergy and Infectious Diseases	1
EMD Serono	1
Emory University	1
Engineering and Physical Sciences Research Council	1
F. Hoffmann-La Roche	1
Ferring Pharmaceuticals	1
Florida Agricultural Experiment Station	1
Fondation CHU de Québec	1
G. Harold and Leila Y. Mathers Charitable Foundation	1
Galderma	1
Genentech	1
Gilead UK and Ireland Corporate Contributions	1
Global Health Innovative Technology Fund	1
Harvard Medical School	1
Heising-Simons Foundation	1
Horizon 2020	1
Horizon Pharma	1
Howard Hughes Medical Institute	1
Imperial College Healthcare NHS Trust	1
Imperial College London	1
Institute of Food and Agricultural Sciences	1
Inyuvesi Yakwazulu-Natali	1
JPB Foundation	1
Johns Hopkins University	1
King Abdulaziz University	1
King Saud University	1
Korea Basic Science Institute	1
Leeds Biomedical Research Centre	1
Major Science and Technology Projects in Yunnan Province	1
Massachusetts General Hospital	1
Medtronic	1
Merck KGaA	1
Merck Sharp and Dohme	1
Ministerio de Ciencia e Innovación	1
Ministerio de EconomÃa y Competitividad	1
Ministerio de Economía y Competitividad	1