[Indian J Chest Dis Allied Sci 2020;62:221-222]

Abstracts' Service

Publishing Volumes in Major Databases Related to Covid-19

Jaime A Teixeira da Silva, Panagiotis Tsigaris and Mohammadamin Erfanmanesh

Scientometrics. 2020 Aug 28;1-12

The SARS-CoV-2 virus, which causes Covid-19, induced a global pandemic for which an effective cure, either in the form of a drug or vaccine, has yet to be discovered. In the few brief months that the world has known Covid-19, there has been an unprecedented volume of papers published related to this disease, either in a bid to find solutions, or to discuss applied or related aspects. Data from Clarivate Analytics' Web of Science, and Elsevier's Scopus, which do not index preprints, were assessed. Our estimates indicate that 23,634 unique documents, 9960 of which were in common to both databases, were published between January 1 and June 30, 2020. Publications include research articles, letters, editorials, notes and reviews. As one example, amongst the 21,542 documents in Scopus, 47.6% were research articles, 22.4% were letters, and the rest were reviews, editorials, notes and other. Based on both databases, the top three countries, ranked by volume of published papers, are the USA, China, and Italy while BMJ, Journal of Medical Virology and The Lancet published the largest number of Covid-19-related papers. This paper provides one snapshot of how the publishing landscape has evolved in the first six months of 2020 in response to this pandemic and discusses the risks associated with the speed of publications.

Efficacy and Safety of Hydroxychloroquine vs Placebo for Pre-exposure SARS-CoV-2 Prophylaxis Among Health Care Workers: A Randomized Clinical Trial

Benjamin S Abella, Eliana L Jolkovsky, Barbara T Biney, Julie E Uspal, Matthew C Hyman, Ian Frank, Scott E Hensley, Saar Gill, Dan T Vogl, Ivan Maillard, Daria V Babushok, Alexander C Huang, Sunita D Nasta, Jennifer C Walsh, E Paul Wiletyo, Phyllis A Gimotty, Michael C Milone, Ravi K Amaravadi, and the Prevention and Treatment of COVID-19 With Hydroxychloroquine (PATCH) Investigators

JAMA Intern Med. 2020 Sep 30. doi: 10.1001/jamainternmed.2020.6319. Online ahead of print.

Importance. Health care workers (HCWs) caring for patients with coronavirus disease 2019 (COVID-19) are at risk of exposure to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Currently, to our knowledge, there is no effective pharmacologic prophylaxis for individuals at risk.

Objective. To evaluate the efficacy of hydroxychloroquine to prevent transmission of SARS-CoV-2 in hospital-based HCWs with exposure to patients with COVID-19 using a pre-exposure prophylaxis strategy.

Design, setting, and participants. This randomized, double-blind, placebo-controlled clinical trial (the Prevention and Treatment of COVID-19 With Hydroxychloroquine Study) was conducted at 2 tertiary urban hospitals, with enrollment from April 9, 2020, to July 14, 2020; follow-up ended August 4, 2020. The trial randomized 132 full-time, hospital-based HCWs (physicians, nurses, certified nursing assistants, emergency technicians, and respiratory therapists), of whom 125 were initially asymptomatic and had negative results for SARS-CoV-2 by nasopharyngeal swab. The trial was terminated early for futility before reaching a planned enrollment of 200 participants.

Interventions. Hydroxychloroquine, 600 mg, daily, or size-matched placebo taken orally for 8 weeks.

Main outcomes and measures. The primary outcome was the incidence of SARS-CoV-2 infection as determined by a nasopharyngeal swab during the 8 weeks of treatment. Secondary outcomes included adverse effects, treatment discontinuation, presence of SARS-CoV-2 antibodies, frequency of QTc prolongation, and clinical outcomes for SARS-CoV-2-positive participants.

Results. Of the 132 randomized participants (median age, 33 years [range, 20-66 years]; 91 women [69%]), 125 (94.7%) were evaluable for the primary outcome. There was no significant difference in infection rates in participants randomized to receive hydroxychloroquine compared with placebo (4 of 64 [6.3%] vs 4 of 61 [6.6%]; P > .99). Mild adverse events were more common in participants taking hydroxychloroquine compared with placebo (45% vs 26%; P = .04); rates of treatment discontinuation were similar in both arms (19% vs 16%; P = .81). The median change in QTc (baseline to 4-week evaluation) did not differ between arms (hydroxychloroquine: 4 milliseconds; 95% CI, -9 to 17; vs placebo: 3 milliseconds; 95% CI, -5 to 11; P = .98). Of

the 8 participants with positive results for SARS-CoV-2 (6.4%), 6 developed viral symptoms; none required hospitalization, and all clinically recovered.

Conclusions and relevance. In this randomized clinical trial, although limited by early termination, there was no clinical benefit of hydroxychloroquine administered daily for 8 weeks as pre-exposure prophylaxis in hospital-based HCWs exposed to patients with COVID-19.

Convalescent Plasma in the Management of Moderate Covid-19 in Adults in India: Open Label Phase II Multicentre Randomized Controlled Trial (PLACID Trial)

Anup Agarwal, Aparna Mukherjee, Gunjan Kumar, Pranab Chatterjee, Tarun Bhatnagar, Pankaj Malhotra, on behalf of the PLACID Trial Collaborators

BMJ 2020;371:m3939 http://dx.doi.org/10.1136/bmj.m3939

Objective. To investigate the effectiveness of using convalescent plasma to treat moderate coronavirus disease 2019 (covid-19) in adults in India.

Design. Open label, parallel arm, phase II, multicentre, randomised controlled trial.

Setting. 39 public and private hospitals across India.

Participants. 464 adults (≥18 years) admitted to hospital (screened 22 April to 14 July 2020) with confirmed moderate covid-19 (partial pressure of oxygen in arterial blood/fraction of inspired oxygen (PaO2 /FiO2) ratio between 200 mm Hg and 300 mm Hg or a respiratory rate of more than 24/min with oxygen saturation 93% or less on room air): 235 were assigned to convalescent plasma with best standard of care (intervention arm) and 229 to best standard of care only (control arm).

Interventions. Participants in the intervention arm received two doses of 200 mL convalescent plasma, transfused 24 hours apart. The presence and levels of neutralizing antibodies were not measured a priori; stored samples were assayed at the end of the study.

Main Outcome Measure. Composite of progression to severe disease (PaO2/ FiO2 <100 mm Hg) or all cause mortality at 28 days post-enrolment.

Results. Progression to severe disease or all cause mortality at 28 days after enrolment occurred in 44 (19%) participants in the intervention arm and 41 (18%) in the control arm (risk difference 0.008 (95% confidence interval −0.062 to 0.078); risk ratio 1.04, 95% confidence interval 0.71 to 1.54).

Conclusion. Convalescent plasma was not associated with a reduction in progression to severe covid-19 or all cause mortality. This trial has high generalisability and approximates convalescent plasma use in real life settings with limited laboratory capacity. A priori measurement of neutralising antibody titres in donors and participants might further clarify the role of convalescent plasma in the management of covid-19.

Trial Registration. Clinical Trial Registry of India CTRI/2020/04/024775.

The Top 100 Cited Articles in Lung Cancer - A Bibliometric Analysis

Nilay Sengul Samanci and Emir Celik

Contemp Oncol (Pozn). 2020;24(1):17-28. doi: 10.5114/wo.2020.94725. Epub 2020 Mar 30.

Aim of the study. To analyze the 100 most cited lung cancer articles published in biomedical literature in the last 44 years. We pointed out developments in lung cancer and aimed to create convenient access for the researchers of this dynamic field.

Material and methods. We accessed the WoS database (accessed: 15.07.2019) using the keyword "lung cancer" between 1975 and 2019. The top 100 cited articles were analyzed by topic, journal, author, year, institution, level of evidence, adjusted citation index and also the correlations between citation, adjusted citation index, impact factor and length of time since publication.

Results. A total of 240,701 eligible articles were identified and we chose the top 100 articles cited in the field of lung cancer. The mean number of citations for these articles was 1879.82 ±1264.78. The most cited article was (times cited: 7751) a study by Lynch *et al*. *The New England Journal of Medicine* (NEJM) made the greatest contribution to the top 100 list with 32 articles, and the most cited article also originated from NEJM. The highest number of citations was seen in 2017 with 18,393 citations while the highest number of publications was seen in 2005 with 12 publications.

Conclusions. Oncology is a developing field and we have seen the evolution in this area through the treatment of lung cancer in recent years. The first 100 articles in our analysis not only reflect the landmark articles with the greatest impact on lung cancer research, but also acknowledge the most productive authors and institutions that have contributed to the list with their articles.