

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Correspondance

Available online at

# **ScienceDirect**

www.sciencedirect.com

Elsevier Masson France







#### ARTICLE INFO

Letter to Sarah Basin et al.

Article history:

Available online 5 March 2022

Keywords: COVID19 Asthma Inhaled corticosteroids

We read with interest the work of Sarah Basin et al [1]. who are to be congratulated for their counter intuitive insight into the assessment of risk in patients with chronic respiratory diseases and we fully agree with them when they conclude that this category of patients is under-represented among those who will present the most severe forms of Covid 19.

However, in claiming that they are the first to provide such data, they are leaving out substantial data from the literature that have led to meta-analyses showing an apparent protective role of chronic respiratory diseases [2], especially for asthma [3].

These collections of observational data have recently been enriched by data from the "Open Safely" [4] and "Isaric" cohorts [5], suggesting that only the most severe forms of these respiratory diseases constitute an excess risk. The latter study also suggests a protective role for inhaled steroids in the treatment of these chronic diseases and this point is also mentioned by Sarah Basin et al., but again they neglect to mention the results of five randomized trials evaluating the impact of inhaled steroids in the early stages of the disease [6–10]. These trials, although varying in the endpoints, appear to be consistent in finding beneficial effects of inhaled steroids, such as reduced use of emergency care [7,8] and reduced duration of symptoms.

The data of Basin et al. are thus totally consistent with the recent findings of the medical literature contributing to a better understanding of the risk assessment of our patients, confirming that treatment with inhaled steroids should be maintained and strengthening the hypothesis that the introduction of these agents could be a useful therapeutic contribution in the moderate forms of COVID. Four ongoing clinical trials addressing this issue, NCT04355637, NCT04381364, and NCT04920838, although subject to inclusion difficulties related to variations could clarify their indications.

## **Declaration of Competing Interest**

None.

## References

- Basin S, Valentin S, Maurac A, Poussel M, Pequignot B, Brindel A, et al. Progression to a severe form of COVID-19 among patients with chronic respiratory diseases. Respir Med Res 2022;81:100880. doi: 10.1016/j.resmer.2021.100880.
- [2] Rogliani P, Lauro D, Di Daniele N, Chetta A, Calzetta L. Reduced risk of COVID-19 hospitalization in asthmatic and COPD patients—A benefit of inhaled corticosteroids? Expert Rev Respir Med 2021;15:561–8. doi: 10.1080/17476348.2021. 1850275.
- [3] Sunjaya AP, Allida SM, Di Tanna GL, Jenkins CR. Asthma and Coronavirus Disease 2019 Risk: a systematic review and meta-analysis. [published online ahead of print, 2021 Aug 24]. Eur Respir J 2021:2101209.
- [4] Schultze A, Walker AJ, MacKenna B, Morton CE, Bhaskaran K, Brown JP, et al. Risk of COVID-19-related death among patients with chronic obstructive pulmonary disease or asthma prescribed inhaled corticosteroids—An observational cohort study using the OpenSAFELY platform. Lancet Respir Med 2020;8:1106–20. doi: 10.1016/S2213-2600(20)30415-X.
- [5] Bloom CI, Drake TM, Docherty AB, et al. Risk of adverse outcomes in patients with underlying respiratory conditions admitted to hospital with COVID-19: a national, multicentre prospective cohort study using the ISARIC WHO Clinical Characterisation Protocol UK. Lancet Respir Med 2021;9(7):699–711.
- [6] Yu LM, Bafadhel M, Dorward J, et al. Inhaled budesonide for COVID-19 in people at high risk of complications in the community in the UK (PRINCIPLE): a randomised, controlled, open-label, adaptive platform trial [published correction appears in Lancet. 2021 Aug 18]. Lancet 2021;398(10303):843–55.
- [7] Ramakrishnan S, Nicolau DV, Langford B, et al. Inhaled budesonide in the treatment of early COVID-19 (STOIC): a phase 2, open-label, randomised controlled trial [published correction appears in Lancet Respir Med. 2021 Jun;9(6):e55]. Lancet Respir Med 2021;9(7):763–72.
- [8] Clemency BM, Varughese R, Gonzalez-Rojas Y, et al. Efficacy of Inhaled Ciclesonide for Outpatient Treatment of Adolescents and Adults With Symptomatic COVID-19: A Randomized Clinical Trial. JAMA Intern Med 2022;182(1):42–9.
- [9] Song J-Y, Yoon J-G, Seo Y-B, Lee J, Eom J-S, Lee J-S, et al. Ciclesonide inhaler treatment for mild-to-moderate COVID-19–A randomized, open-label, phase 2 trial. JCM 2021;10:3545. doi: 10.3390/jcm10163545.
- [10] Ezer N, Belga S, Daneman N, et al. Inhaled and intranasal ciclesonide for the treatment of covid-19 in adult outpatients: CONTAIN phase II randomised controlled trial. BMJ 2021;372:e068060.

### Antoine Ausset

Cluj-Napoca Faculté de Médecine, Medical Student, Université de Médecine et Pharmacie, "Iuliu Hațieganu", Cluj-Napoca 400000, Romania

https://doi.org/10.1016/j.resmer.2022.100895 2590-0412/© 2022 SPLF and Elsevier Masson SAS. All rights reserved.

Accepted 11 February 2022

Available online 5 March 2022

Monica Pop Department of Pneumology, "Iuliu Hatieganu" University of Medicine and Pharmacy, 400000 Cluj Napoca, Romania. E-mail address: antoine.ausset@gmail.com (A. Ausset).

Received 4 February 2022