

## Considerations on the article «antiviral and anti-inflammatory properties of ivermectin and its potential use in COVID-19»<sup>☆</sup>



### Consideraciones sobre el artículo «Propiedades antivirales y antiinflamatorias de ivermectina y su potencial uso en COVID-19»

To the Editor:

We have read with great interest the Letter to the Editor from Portmann-Baracco et al. published in the journal ARCHIVOS DE BRONCONEUMOLOGÍA entitled “Antiviral and anti-inflammatory properties of ivermectin and its potential use in Covid-19”, in which they state that ivermectin could be an alternative for the treatment of SARS-CoV-2,<sup>1</sup> basing their claims on an *in vitro* study that was not performed with SARS-CoV-2 virus (Wagstaff et al.) and an observational study published as a pre-print by Patel et al.<sup>2</sup> The authors quote the study by Patel et al. under reference 3, but this citation is incorrect, and in reality this study was not published in the *New England Journal of Medicine* (NEJM); in fact, it was not published in any peer-reviewed journal. Notwithstanding, the letter as published might lead to some misconceptions, because it discusses the possible benefits of ivermectin based on a study that was merely published as a pre-print. The veracity of the data was seriously questioned and it was eventually retracted by the SSRN repository.<sup>2</sup> We must point out that we do not know the date of submission or receipt of the letter in question, and we cannot tell if it was written before or after the withdrawal of the pre-print.

We would also like to draw attention to the fact that one of the authors of the letter is a member of the Committee of Experts of the Peruvian Ministry of Health (MINSa)<sup>3</sup> that is responsible for proposing effective treatments against Covid-19. Nevertheless, after discussing possible therapeutic alternatives and despite the low level of evidence, 95% of the members of this committee were in favor of proposing the use of ivermectin at a dose of 200 µg/kg body weight.<sup>4</sup> Portmann-Baracco et al. state in their article that they have no conflicts of interest to declare, but this may contravene good research practices,<sup>5</sup> since it is public knowledge that the aim of the declaration of conflicts of interest is to transparently declare that the research has not been influenced by external interests. Given the current situation in the country, where, in direct contravention of international recommendations, proposals continue to be made for drugs that have not been proven useful (hydroxychloroquine) or effective and safe (ivermectin) in the treatment of Covid-19, we believe that emphasis should be placed on rigorous research, thus avoiding unnecessary discussions among clinicians, researchers and academics<sup>6</sup> on ineffective and unsafe treatments.

In conclusion, we call upon our professionals to practice responsible science in the context of the Covid-19 pandemic, bearing in mind that the principle of *primum non nocere* should prevail over the recommendation of treatments with ambiguous risk-benefit profiles. Users of the information should also note that any scientific or non-scientific publication should be critically analyzed in

order to identify potential biases or conflicts of interest that may be reflected by positions or preferences for or against the use of medicines to treat diseases. Only in this way can we ensure that increasing numbers of healthcare professionals employ evidence-based measures to treat and ensure the safety of their patients.

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### Authorship

All the authors sought information, discussed the studies, wrote the manuscript, critically reviewed it and approved its final version.

### Conflict of interest

Akram Hernández-Vásquez and Diego Azañedo have carried out health technology assessments on Covid-19 for the Peruvian Social Security. Rodrigo Vargas-Fernández states that he has no conflict of interests.

### References

1. Portmann-Baracco A, Bryce-Alberti M, Accinelli RA. Antiviral and anti-inflammatory properties of ivermectin and its potential use in Covid-19. Arch Bronconeumol. 2020, <http://dx.doi.org/10.1016/j.arbres.2020.06.011>.
2. Patel AN, Desai SS. Ivermectin in COVID-19 Related Critical Illness [Internet]. [citado el 3 de agosto de 2020]. Available from: <https://www.isglobal.org/documents/10179/6022921/Patel+et+al.+2020+version+1.pdf/fab19388-dc3e-4593-a075-db96f4536e9d>.
3. Ministerio de Salud. Resolución Ministerial No 307-2020-MINSA [Internet]. MINSA; 2020 [citado el 3 de agosto de 2020]. Available from: [https://cdn.www.gob.pe/uploads/document/file/751008/RM\\_307-2020-MINSA.PDF](https://cdn.www.gob.pe/uploads/document/file/751008/RM_307-2020-MINSA.PDF).
4. Ministerio de Salud. Resolución Ministerial No 375-2020-MINSA [Internet]. MINSA; 2020 [citado el 3 de agosto de 2020]. Available from: [https://cdn.www.gob.pe/uploads/document/file/829755/RM\\_375-2020-MINSA.PDF](https://cdn.www.gob.pe/uploads/document/file/829755/RM_375-2020-MINSA.PDF).
5. Soto Subiabre M. Declaración de conflictos de intereses: contribución a la mejora en la calidad ética de las publicaciones. Rev Med Chil. 2016;144:1067–72, <http://dx.doi.org/10.4067/S0034-98872016000800015>.
6. Chirinos JA, Corrales-Medina VF, Heresi-Dávila G, Hernandez AV, Málaga G, Mallea JM, et al. Sobre las recomendaciones del Ministerio de Salud para el tratamiento farmacológico de la COVID-19 en el Perú. Acta Med Peru. 2020;37:231–5, <http://dx.doi.org/10.35663/amp.2020.372.1030>.

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