collected data was approved by the National Research Ethics Council (CONEP) under the number 4.821.082 with the project number CAAE: 47124221.2.0000.5485. Although study design, IRB approval, and data analysis occurred after completion of the voluntary prophylaxis program, all data were collected prospectively in real time with mandated reporting to the registry of all events as they occurred during the citywide governmental COVID-19 prevention with ivermectin program, from July 2020 to December 2020, developed in the city of Itajaí, in the state of Santa Catarina, Brazil. **Animal subjects:** All authors have confirmed that this study did not involve animal subjects or tissue. **Conflicts of interest:** In compliance with the ICMJE uniform disclosure form, all authors declare the following: **Payment/services info:** All authors have declared that no financial support was received from any organization for the submitted work. **Financial relationships:** All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. **Other relationships:** All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

CUREUS ITAJAÍ PAPER PUBLISHED OLD VERSION AFTER CONFLITCTS OF INTEREST CORRECTION

ALL AUTHORS WAS DECLARED NO FINANCIAL SUPPORT OR RELATIONSHIPS WITH ANY ORGANIZATIOIN MIGHT HAVE INTEREST IN THIS WORK

Acknowledgements

We acknowledge Dr. Volnei José Morastoni, the city mayor of Itajaí, state of Santa Catarina, Brazil, for developing and enabling the citywide program of ivermectin for COVID-19 prophylaxis. We also acknowledge all the staff that worked at the citywide program for COVID-19 prevention with ivermectin in Itajaí, state of Santa Catarina, Brazil, and also, those who directly or indirectly offered pro bono support for the subjects that participated in the program, compilation of data, or were involved in any other step that led to the present analysis.

References

1. Chen IS, Kubo Y: Ivermectin and its target molecules: shared and unique modulation mechanisms of ion channels and receptors by ivermectin. J Physiol. 2018, 596:1833-45. 10.1113/JP275236
2. Kaur H, Shekhar N, Sharma S, Sarma P, Prakash A, Medhi B: Ivermectin as a potential drug for treatment of COVID-19: an in-sync review with clinical and computational attributes. Pharmacol Rep. 2021, 73:736-49. 10.1007/s43440-020-00195-y
3. Martin RJ, Robertson AP, Choudhary S: Ivermectin: an anthelmintic, an insecticide, and much more. Trends Parasitol. 2021, 37:48-64. 10.1016/j.pt.2020.10.005
4. Mastrangelo E, Pezzullo M, De Burghgraeve T, et al.: Ivermectin is a potent inhibitor of flavivirus replication specifically targeting NS3 helicase activity: new prospects for an old drug. J Antimicrob Chemother. 2012, 67:1884-94. 10.1093/jac/dks147
5. Wagstaff KM, Sivakumaran H, Heaton SM, Harrich D, Jans DA: Ivermectin is a specific inhibitor of importin α/β-mediated nuclear import able to inhibit replication of HIV-1 and dengue virus. Biochem J. 2012, 443:851-6. 10.1042/BJ20120150
6. Crump A: Ivermectin: enigmatic multifaceted 'wonder' drug continues to surprise and exceed expectations . J Antibiot (Tokyo). 2017, 70:495-505. 10.1038/ja.2017.11
7. Heidary F, Gharebaghi R: Ivermectin: a systematic review from antiviral effects to COVID-19 complementary regimen. J Antibiot (Tokyo). 2020, 73:593-602. 10.1038/s41429-020-0336-z
8. Li N, Zhao L, Zhan X: Quantitative proteomics reveals a broad-spectrum antiviral property of ivermectin, benefiting for COVID-19 treatment. J Cell Physiol. 2021, 236:2959-75. 10.1002/jcp.30055
9. Jin L, Feng X, Rong H, et al.: The antiparasitic drug ivermectin is a novel FXR ligand that regulates metabolism. Nat Commun. 2013, 4:1937. 10.1038/ncomms2924
10. Yang JS, Qi W, Farias-Pereira R, Choi S, Clark JM, Kim D, Park Y: Permethrin and ivermectin modulate lipid metabolism in steatosis-induced HepG2 hepatocyte. Food Chem Toxicol. 2019, 125:595-604. 10.1016/j.fct.2019.02.005
11. Cairns DM, Giordano JE, Conte S, Levin M, Kaplan DL: Ivermectin promotes peripheral nerve regeneration during wound healing. ACS Omega. 2018, 3:12392-402. 10.1021/acsomega.8b01451
12. Zheng YY, Ma YT, Zhang JY, Xie X: COVID-19 and the cardiovascular system. Nat Rev Cardiol. 2020, 17:259-60. 10.1038/s41569-020-0360-5
13. Nagai H, Satomi T, Abiru A, et al.: Antihypertrophic effects of small molecules that maintain mitochondrial ATP levels under hypoxia. EBioMedicine. 2017, 24:147-58. 10.1016/j.ebiom.2017.09.022
14. Park A, Iwasaki A: Type I and type III interferons - induction, signaling, evasion, and application to combat COVID-19. Cell Host Microbe. 2020, 27:870-8. 10.1016/j.chom.2020.05.008
15. Zhang X, Song Y, Ci X, et al.: Ivermectin inhibits LPS-induced production of inflammatory cytokines and improves LPS-induced survival in mice. Inflamm Res. 2008, 57:524-9. 10.1007/s00011-008-8007-8
16. Okeahialam BN: Serine protease inhibitors could be of benefit in the treatment of COVID-19 disease . Ther Adv Infect Dis. 2021, 8:10.1177/20499361211032048
17. Matsuyama T, Kubli SP, Yoshinaga SK, Pfeffer K, Mak TW: An aberrant STAT pathway is central to COVID-19. Cell Death Differ. 2020, 27:3209-25. 10.1038/s41418-020-00633-7
18. Wang K, Gao W, Dou Q, Chen H, Li Q, Nice EC, Huang C: Ivermectin induces PAK1-mediated cytostatic autophagy in breast cancer. Autophagy. 2016, 12:2498-9. 10.1080/15548627.2016.1231494
19. Dou Q, Chen HN, Wang K, et al.: Ivermectin induces cytostatic autophagy by blocking the PAK1/Akt axis in breast cancer. Cancer Res. 2016, 76:4457-69. 10.1158/0008-5472.CAN-15-2887
20. Layhadi JA, Turner J, Crossman D, Fountain SJ: ATP evokes Ca2+ responses and CXCL5 secretion via P2X4 receptor activation in human monocyte-derived macrophages. J Immunol. 2018, 200:1159-68. 10.4049/jimmunol.1700965
21. Juarez M, Schcolnik-Cabrera A, Dueñas-Gonzalez A: The multitargeted drug ivermectin: from an antiparasitic agent to a repositioned cancer drug. Am J Cancer Res. 2018, 8:317-31.
22. Andersson U, Ottestad W, Tracey KJ: Extracellular HMGB1: a therapeutic target in severe pulmonary

Erratum: Ivermectin Prophylaxis Used for COVID-19: A Citywide, Prospective, Observational Study of 223,128 Subjects Using Propensity Score Matching

Article published 01/15/2022
Article corrected 03/24/2022

Lucy Kerr [1], Flavio A. Cadegiani [2, 3], Fernando Baldi [4], Raysildo B. Lobo [5], Washington Luiz O. Assagra [6], Fernando Carlos Proença [7], Pierre Kory [8], Jennifer A. Hibberd [9], Juan J. Chamie-Quintero [10]

1. Medicine, Instituto Kerr, São Paulo, BRA 2. Clinical Endocrinology, Corpometria Institute, Brasilia, BRA 3. Clinical Endocrinology, Applied Biology Inc, Irvine, USA 4. Animal Sciences, Universidade Estadual de São Paulo (UNESP), São Paulo, BRA 5. Genetics, Universidade de São Paulo, Ribeirão Preto, BRA 6. Genetics, Centro Técnico de Avaliação Genômica - C.T.A.G., Ribeirão Preto, BRA 7. Bioinformatics, Itajaí City Hall, Itajaí, BRA 8. Internal Medicine, Front Line COVID-19 Critical Care Alliance (FLCCC), Madison, USA 9. Dentistry, University of Toronto, Toronto, CAN 10. Data Analysis, Universidad EAFIT, Medellín, COL

Corresponding author: Flavio A. Cadegiani, flavio.cadegiani@unifesp.br

Corresponding author: Flavio A. Cadegiani

1. Medicine, Instituto Kerr, São Paulo, BRA 2. Clinical Endocrinology, Corpometria Institute, Brasilia, BRA 3. Clinical Endocrinology, Applied Biology Inc, Irvine, USA 4. Animal Sciences, Universidade Estadual de São Paulo (UNESP), São Paulo, BRA 5. Genetics, Universidade de São Paulo, Ribeirão Preto, BRA 6. Genetics, Centro Técnico de Avaliação Genômica - C.T.A.G., Ribeirão Preto, BRA 7. Bioinformatics, Itajaí City Hall, Itajaí, BRA 8. Internal Medicine, Front Line COVID-19 Critical Care Alliance (FLCCC), Madison, USA 9. Dentistry, University of Toronto, Toronto, CAN 10. Data Analysis, Universidad EAFIT, Medellín, COL

How to cite this erratum
Kerr L, Cadegiani F A, Baldi F, et al. (March 24, 2022) Correction: Ivermectin Prophylaxis Used for COVID-19: A Citywide, Prospective, Observational Study of 223,128 Subjects Using Propensity Score Matching. Cureus 14(3): c61. doi:10.7759/cureus.c61

Correction Notice

It has come to the attention of the journal that several authors failed to disclose all relevant conflicts of interest when submitting this article. As a result, Cureus is issuing the following erratum and updating the relevant conflict of interest disclosures to ensure these conflicts of interest are properly described as recommended by the ICMJ:

- **Lucy Kerr:** Paid consultant for both Vitamedic, an ivermectin manufacturer, and Médicos Pela Vida (MPV), an organization that promotes ivermectin as a treatment for COVID-19.
- **Flavio A. Cadegiani:** Paid consultant ($1,600.00 USD) for Vitamedic, an ivermectin manufacturer. Dr. Cadegiani is a founding member of the Front Line COVID-19 Critical Care Alliance (FLCCC), an organization that promotes ivermectin as a treatment for COVID-19.
- **Pierre Kory:** President and Chief Medical Officer of the Front Line COVID-19 Critical Care Alliance (FLCCC), an organization that promotes ivermectin as a treatment for COVID-19. Dr. Kory reports receiving payments from FLCCC. In February of 2022, Dr. Kory opened a private telehealth fee-based service to evaluate and treat patients with acute COVID, long haul COVID, and post-vaccination syndromes.
- **Jennifer A. Hibberd:** Co-founder of the Canadian Covid Care Alliance and World Council for Health, both of which discourage vaccination and encourage ivermectin as a treatment for COVID-19.
- **Juan J. Chamie-Quintero:** Contributor to the Front Line COVID-19 Critical Care Alliance (FLCCC) and lists the FLCCC as his employer on his LinkedIn page.

NEW DECLARATION FROM AUTHORS

THE MAIN AUTHORS RECEIVED AND RECEIVE SALARY FROM THE PHARMACEUTICAL INDUSTRY - VITAMEDIC THAT SOLD THE MUNICIPALITY OF ITAJAI 3000000 TABLETS OF IVERMECTINA FOR THE AMOUNT OF R$ 4,415,000.00 (US$ 1 MILLION) - PRICE OF R$ 1.48 PER TABLET