

Medical use of adjunct oxygen-ozone therapy and its impact on the scientific literature to date

Salvatore Chirumbolo,^{a,*} Luigi Valdenassi,^b Sergio Pandolfi,^b Umberto Tirelli,^c and Marianno Franzini^b

^aDepartment of Engineering for Innovation Medicine, University of Verona, Italy

^bScientific Society of Oxygen Ozone Therapy (SIOOT), Bergamo, Italy

^cTirelli Medical Group and Former Director of the Oncology Unit in the National Institute of Cancer, Aviano, PN, Italy

In his recent comment on this journal, Hesley Machado Silva reported criticism about the use of ozone in medicine. He exhibited an outcry against Lula's Government approval of ozone therapy, since Bolsonaro's policy to push forward a purported official science denialism, went ahead even with current politicians in Brazil, according to the author.¹ Aside from the angry allegations against more recent Brazilian Presidents and their Governments, with their unpopular decisions on public health, we are particularly puzzled about the terms denialism and pseudoscience the author adopted and who referred, directly or indirectly, to ozone therapy.¹ In our opinion it is dumbfounding that a leading journal such as *The Lancet* offers the scenery to a raw political rally, rather than to a properly documented commentary on a scientific issue. Ozone therapy is not an exclusive matter of internet and social network, as reported by the author in his Comment.¹ Leading impacted journals hosted many experimental papers about ozone therapy. Although Machado Silva's comment seems to be restricted to Brazil, many European countries (e.g., Russia, Germany, Spain) widely use oxygen-ozone therapy in medical practice and in Italy, some Regions (for example Lombardy) included ozone therapy within the NIH Essential Assistance Levels (LEA), whereas numerous clinicians and health-care workers, seriously engaged in this field, participated and attended the Sixth International Congress on Oxygen-Ozone Therapy, promoted and organized by the Scientific Society of Oxygen Ozone Therapy (SIOOT), which was held in Rome the recent May 16th–18th 2024. The number of papers about ozone therapy published by Brazilian academies is 154 of 4637 (source: PubMed), about 3.32%, representing a negligible part of the “ozone therapy” topic in the scientific community worldwide. Furthermore, 49 meta-analyses, 86 systematic reviews, 242 RCTs, and 30 observational studies, have been published in the official Data Warehouses of scientific impacted publications (source: PubMed), not on social networks alone. Homotherapy is not a correct term, physicians refer to auto-hemotherapy. Several

scientific reports about the use of ozone in COVID-19 were published in impacted journals with Q1 cite score (source: Scopus).

Ozone therapy is widely applied because it targets symptoms shared by most of immune chronic pathologies, never because it is a “universal panacea”, as reported.¹ Oxygen-ozone therapy proved sound efficacy (here is a list of only a few examples) in COVID-19,² ME/CFS,³ post-COVID,⁴ aphthous stomatitis,⁵ antimicrobial therapy,⁶ low back pain,⁷ fibromyalgia,^{8,9} multiple sclerosis,¹⁰ and much more. We gently invite the author to check for the Scopus journal rank quality (according to cite score) of the journals hosting these examples.

We thank the author for giving us the possibility to shed light on this medical practice and its wide representation within the official scientific community.

Contributors

Conceptualization: SC, MF, LV; Data curation: SP; Formal Analysis: SC, LV; Funding acquisition: not applicable, Investigation: MF, SC, Methodology: MF, UT, LV; Project administration: MF; Resources: SP, SC; Software: SP; Supervision: MF, LV, UT; Validation: SC, MF, LV, SP, UT; Visualization: MF, LV; Writing—original draft: SC, MF; Writing—review & editing: MF, LV, SC.

Declaration of interests

We declare no competing interests.

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*Corresponding author.

E-mail addresses: salvatore.chirumbolo@univr.it, salvatore.chirumbolo@gmail.com (S. Chirumbolo).

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