



**ISCO3 Clinical Trials Follow-up to the preliminary results about use of O<sub>2</sub>/O<sub>3</sub> in the treatment /prevention of Novel Coronavirus Pneumonia (COVID-19).**

Country Region	Protocol	Remarks / Side effects
<b>BAZIL</b> Dr. Arnaldo De Souza	Studo multicêntrico da prática integrative e complementar de ozonio terapia em pacientes internados com COVID-19. Estudo multicêntrico da prática integrative e complementar de ozonio terapia em pacientes ambulatoriais com COVID-19.	
<b>CHINA</b> Hospital / N patients = 4 FINISHED* Reg. ChiCTR2000030102 Researcher: Huiling Huang. / Location: Tianjin Haihe	MAH 100 mL blood + 100 mL, up-to 200 mL, 1-2 times a day. Critical case 2-4 times a day. Time schedule: 10 d <b>Case report Ready</b>	Patient feels better // Chest tightness is improved ↑ 50 % PaO <sub>2</sub> after the first application <b>S.E.:</b> <b>Allergy</b>
ChiCTR2000030165 Tianjin University ChiCTR2000030006 Union Hospital	control group:30; mild ill patients:15; severe/critical ill patients:15;	
<b>CUBA</b> Hosp. Dr. Salvador Allende, Sponsor: Dr. Rodolfo Suárez OZO-001	Rectal insufflation in SARS-CoV2 hosp. patients	↓ Viral Load in 5 days ↑ Clinic
CNIC (Promotor). Inv. P. Zullyt Zamora R RPCEC00000320	Rectal insufflation in SARS-CoV2 hosp. patients 16 Conventional Therapy / 16 Conventional plus O <sub>3</sub> rectal (20→40 µg/mL, vol 100 → 200 mL, one every 12 h, total 20 sessions)	Improve clinicals symptoms and oxidative stress markets. ↓ Viral Load in 75% of patients in 6 days.
<b>INDIA</b> Dr Mili Shah CTRI/2020/07/026354	n=60 Rectal insufflation and minor auto haemotherapy together with standard of care.	There was improved SPO <sub>2</sub> , clinical symptoms status. There was faster viral eradication from host cells. 77% of subjects from the ozone-treated group were RT-PCR negative on day 5 and 100% subjects were RT-PCR negative on day 10.
CTRI/2020/07/026671 Dr Alok Sharma / Dr Mili Arpan / Dr Jignasha	N=10 O <sub>3</sub> SS	
CTRI/2020/08/027038 Dr. Prabhat Kumar / Dr. Ashish	N=100 Study to assess effects of nano ozonised hydrogen peroxide nebulisation on results of RT-PCR for novel corona Virus thus infectivity and clinical course among mild to moderate sick COVID-19 Patients	
<b>IRAN</b> IRCT20191125045492N2 Bagheiat-allah Univ. of Med. Sci. Staff: Dr. Ali Sarrafzadeh/Dr. Izadi/Dr. Effat Nikfarjam	<b>Moderate</b> MAH 100-200 mL O <sub>3</sub> 1:1 35→45 µg/mL, daily 4 session <b>Severe</b> MAH 200 mL O <sub>3</sub> 1:1 35 →50 µg/mL daily 7 session O <sub>3</sub> water 60 mL every 6 h	Preliminary results (n=14): Clinical improve. CT evidence of improvement Not yet recruiting
IRCT20200616047792N1	Ahvaz University of Medical Sciences	
IRCT20190618043923N4	Ozone Autohemotherapy in Covid19. Tabriz University of Medical Sciences NCT04400006	
<b>ITALY</b> ClinicalTrials.gov <b>NCT04366089</b> N= 152 vs Control. Condition: Mild /Severe Researcher: Fabio Araimo Sponsor: Roberto Poscia M.D., Ph.D.	<b>MAH</b> Proportion of O <sub>2</sub> /O <sub>3</sub> : Blood 1:1. 250 mL O <sub>2</sub> /O <sub>3</sub> 30 µg/mL, every 12 h for 7 days. Location: Hosp. Umberto I. Roma Approval: Hosp. Umberto I /Univ. Sapienza Roma	Preliminary results: Fast ↓ RT-PCR 2019-nCoV. IL-6↓ <b>?</b>
Researcher: Amado del Monte / Carlo Tascini ClinicalTrials.gov Identifier: <b>NCT04388514</b> Location: Hosp. Univ. Santa M. Misericordia / Udine Approval: <b>Pending</b> EC Univ. Friuli	Proportion of O <sub>2</sub> /O <sub>3</sub> : Blood 1:1. MAH 200 mL. O <sub>2</sub> /O <sub>3</sub> 40 µg/mL, 3 times Groups: Antiretroviral therapy (AT) / or AT + O <sub>3</sub> N= 90 treated / two groups of 45	Preliminary outcome: Clinical improvement in 35 /36 patients. Recruiting <b>?</b>
Sponsor: Mariano Franzini // SIOOT Location: 17 Hosp.? N= 73 Approval: <b>?</b>	<b>Mild:</b> MAH blood: 150-200 mL 1:1 O <sub>3</sub> 30/ 40 µg/mL. 2 times a week. Ozonized oil spray 2 times a day. <b>Moderate:</b> MAH blood: 150-200 mL 1:1 O <sub>3</sub> 40/ 50 µg/mL. 3 times a week. Ozonized oil spray 2/3 times a day. Ozonized water 250 mL 3 times a day. <b>Severe / Critical: ?</b>	↑: PaO <sub>2</sub> , clinical symptoms, Renal function, Cardiac frequency, ↓ Fever, ↓PCR, removal of assistant respiration in 5 days. <b>S.E.:</b> 1 death not associated with treatment septic shock
<b>SPAIN</b> EudraCT: 2020-002425-28 N= 50 Preliminary results available Sponsor: AEPRMO. Approved by etic committee 18/05/2020-05/20	O <sub>3</sub> SS 5→3 µg/kg b.w. a day x 10 days Vit.C + GSH 1,2 g i.v. in 100 mL Saline	↓ Fever in 3-4 days ↓ Viral Load in 3-4 days Outcome, Preliminary results: available on Pre-print
ClinicalTrials.gov <b>NCT04359303</b> N=50 Dr. Javier H. Tallón, Univ. Cat. San A. Murcia	MAH O <sub>2</sub> /O <sub>3</sub> : Blood 1:1 200 mL O <sub>3</sub> 40 µg/mL + Base WHO recommended treatment.	Not yet recruiting
ClinicalTrials.gov <b>NCT04370223</b> Researcher: Dr. Alberto Hernández N=10 Location: Hosp N. Señora del Rosario. Ibiza	MAH O <sub>2</sub> /O <sub>3</sub> : Blood 1:1 200 mL 1:1 O <sub>3</sub> 40 µg/mL every 12 h for 5 day, 1 session a day up to 16 sessions. <b>?</b>	↓ Ferritin ↓ d-dimer in 24/48 h ↑ Clinic <b>?</b> Preliminary results available on Pre-print
Institut d'Investigació Biomèdica de Girona Dr. Josep Trueta <b>NCT04444531</b>	18 participants. Ozone autohemotherapy plus standard treatment	<b>Completed recruitment</b> No Results Posted
<b>TURKEY</b> <b>Prevention</b> Sponsor: Marmara University // NCT04400006	10 session in 6 months MAH O <sub>2</sub> /O <sub>3</sub> : Blood 1:1 100 mL O <sub>3</sub> 10 -20 µg/mL. 71 participants.	<b>Completed recruitment</b> No Results Posted
<b>USA</b> Researcher: P. Brian Volpp Location: Palomar Med. Center. California	EBOO 7L of blood in 1h, once a week	Protocol approved by IRB

**Legend:** E.C., etic committee; S.E. side effects; IRB, Institutional Review Boards; FIO; New Italian Federation of Ozone Therapy; O3SS, ozonized Saline Solution; MAH, Mayor autohemotherapy; EBOO, Extracorporeal blood oxygenation-ozonation; RIO3, rectal insufflation; SIOOT, Società Scientifica Ossigeno Ozono Terapia; AIRO, Accademia Internazionale di Ricerca in Ossigeno-Ozono Terapia. \* No more patients available, author will write a case report; ? Not confirmation available.



**ISCO3 Recommendation based on the preliminary results about use of O<sub>2</sub>/O<sub>3</sub> in the treatment /prevention of Novel Coronavirus Pneumonia (COVID-19).**

<p><b>ISCO3 Theoretical protocol for Intervention in case of</b> Mild /Moderate /Severe <b>COVID-19 + CRITICAL O<sub>2</sub>/O<sub>3</sub> NON-considering</b></p>	<p><b>O<sub>3</sub>SS 5 →3 µg/mL (bub.) 200 mL, Daily x 10 d</b> <b>Or MAH Blood vol. 100 mL.</b> <i>Only in patients with normal d dimer values</i> O<sub>2</sub>/O<sub>3</sub>: Blood 1:1. Daily for 5 days + 3 weekly x 10/14 days. Firs week 30 µg/mL, last 40 µg/mL <b>or EBOO (not yet outcome)</b></p>	<p>Consider glutathione 1.2 g or / and Vitamin C 1-3 g in 100 mL of saline. Two times a week for 4 weeks <b>Prelim. Dada Indicate ↑ success of O<sub>3</sub>SS</b></p>																								
<p><b>Intervention alternative when O<sub>3</sub>SS or MAH are not available</b> <b>RIO<sub>3</sub>: 1 every 12 h for 14 days</b></p>	<table border="1"> <thead> <tr> <th>RIO<sub>3</sub></th> <th>Conc.</th> <th>Vol.</th> <th>Dose (mg)</th> </tr> </thead> <tbody> <tr> <td>Day 1 / 2</td> <td>20</td> <td>100</td> <td>2</td> </tr> <tr> <td>Day 3 / 4</td> <td>25</td> <td>150</td> <td>3.75</td> </tr> <tr> <td>Day 5 / 6</td> <td>30</td> <td>150</td> <td>4.5</td> </tr> <tr> <td>Day 7 / 8</td> <td>35</td> <td>200</td> <td>7</td> </tr> <tr> <td>Day 8-14</td> <td>40</td> <td>200</td> <td>8</td> </tr> </tbody> </table> <p>+ <b>MiAH</b> 5 mL Blood + 5 mL O<sub>3</sub> 90 µg/mL, Once a week for 4 weeks.</p>	RIO <sub>3</sub>	Conc.	Vol.	Dose (mg)	Day 1 / 2	20	100	2	Day 3 / 4	25	150	3.75	Day 5 / 6	30	150	4.5	Day 7 / 8	35	200	7	Day 8-14	40	200	8	<p><b>Support:</b> <i>Archiv of Medical Research</i> 2005. 36 (5):549–54 // <i>Virulence</i> 1(3), 2010: 215-217. // <i>Ozone: Science &amp; Engineering</i> 2012.34: 451-458 // <i>Ozone: Science &amp; Engineering</i>, 2016 38 (322-345).</p> <p><b>Oral Therapy:</b> Like in Prevention protocol ↓</p>
RIO <sub>3</sub>	Conc.	Vol.	Dose (mg)																							
Day 1 / 2	20	100	2																							
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Day 8-14	40	200	8																							
<p><b>ISCO3 Theoretical protocol for Prevention</b> Medical doctor or occupational risk people</p>	<p><b>MiAH</b> 5 mL Blood + session 1/2: 5 mL O<sub>3</sub> 25 µg/mL; session 3/4: 5 mL O<sub>3</sub> 30 µg/mL; session 5/6: 5 mL O<sub>3</sub> 30 µg/mL. Once a week. <b>Or</b> <b>Rectal insufflation</b> 3 times a week 40 µg/mL /100 mL</p>	<p>Consider: glutathione 600 mg or / and Vit. C 1 g in 100 mL of saline i.v. once a week. <b>Oral:</b> Once a day: N-acetyl cysteine 600 mg for 30 days, plus Vit.D 2000 UI (o 50 µg). Twice a day Vit. C 500 mg. Melatonin 3/5 mg 30 min before sleep.</p>																								

**Security alert: MAH volume > 100 mL // Risk of thrombus in COVID-19 + Patients**

If your protocol includes MAH use blood volume < 100 mL, use d-dimer as biomarker of potential coagulopathy.

Emerging evidence shows that severe coronavirus disease 2019 (COVID-19) can be complicated with coagulopathy namely disseminated intravascular coagulation, which has a rather pro-thrombotic character with high risk of venous thromboembolism. The incidence of venous thromboembolism among COVID-19 patients in Intensive Care Unit appears to be somewhat higher compared to that reported in other studies including such patients with other disease conditions. D-dimer might help in early recognition of these high-risk patients and also predict outcome. Preliminary data show that in patients with severe COVID-19, anticoagulant therapy appears to be associated with lower mortality in the subpopulation meeting sepsis-induced coagulopathy criteria or with markedly elevated d-dimer. Recent recommendations suggest that all hospitalized COVID-19 patients should receive thromboprophylaxis, or full therapeutic-intensity anticoagulation if such an indication is present. Kollias A, *et al.* Br J Haematol. 2020 Apr 18. doi: 10.1111/bjh.16727

Please, refer any up-date / side effect by E.mail: [info@isco3.org](mailto:info@isco3.org)



**ISCO3 Follow-up to the manuscript about the use of O<sub>2</sub>/O<sub>3</sub> in the treatment /prevention of COVID-19.**

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**Original papers with OUTCOMES:**

Impact Factor	Paper
3.380 Cite Score: 5.1	[Series Case (50 cases), Mayor Auto hemotherapy 100-200 mL, 45 µg/mL, 5 sessions] Marianno Franzini, Luigi Valdenassi, Giovanni Ricevuti, Salvatore Chirumbolo, Markus Depfenhart, Dario Bertossi, Umberto Tirelli. Oxygen-ozone (O <sub>2</sub> -O <sub>3</sub> ) immunoeutical therapy for patients with COVID-19. Preliminary evidence reported. <i>International Immunopharmacology</i> . 2020 August 8, 88: 106879.
2.8	[18 cases, 2 mayor auto hemotherapy a day for 4 days. Full text available in ISCO3 library]. Hernandez A, Viñals M, Pablos A, Vilás F, Papadakos PJ, et al. (2020) Ozone Therapy for Patients with SARS-COV-2 Pneumonia: A Single-Center Prospective Cohort Study. <i>Insights Biomed Vol.5 No.4:13</i>
2.049 H index 111 Cite Score: 4	[Case Report (2 cases)] Z, Zheng, Dong M, and Hu K. ‘A Preliminary Evaluation on the Efficacy of Ozone Therapy in the Treatment of COVID-19’. <i>Journal of Medical Virology. J Med Virol</i> , 21 May 2020. <a href="https://doi.org/10.1002/jmv.26040">https://doi.org/10.1002/jmv.26040</a>
Undetermined PubMed/PMC	[Case Report (4 cases), rectal insufflation] Marcos Edgar Fernández-Cuadros, María Jesús Albaladejo-Florín, Sandra Álava-Rabasa, Isabel Usandizaga-Elio, Dolores Martínez-Quintanilla Jimenez, Daiana Peña-Lora, Inmaculada Neira-Borrajo, María Jesús López-Muñoz, Javier Rodríguez-de-Cía, and Olga Susana Pérez-Moro. Effect of Rectal Ozone (O <sub>3</sub> ) in Severe COVID-19 Pneumonia: Preliminary Results. <i>SN Compr Clin Med</i> . 2020 Aug 3: 1–9. doi: <a href="https://doi.org/10.1007/s42399-020-00374-1">10.1007/s42399-020-00374-1</a>
0.19	[Case report (1 case) Major Autohemotherapy, 100 ml 40 µg/mL for 5 consecutive days] Wu, Junping; Tan, Cherie; Yu, Hongzhi; Wang, Youwei; Tian, Yutao; Shao, Wenwei; Zhang, Yifei; Zhang, Kuo; Shao, Hongxia; Ni, Guangjian; Shen, Jun; Wu, Qi and Ming, Dong. Case Report: Recovery of One ICU-Acquired COVID-19 Patient Via Ozonated Autohemotherapy (March 26, 2020). Available at SSRN: <a href="https://ssrn.com/abstract=3561379">https://ssrn.com/abstract=3561379</a> or <a href="http://dx.doi.org/10.2139/ssrn.3561379">http://dx.doi.org/10.2139/ssrn.3561379</a>
0.08	[98 Covid-19 patients was treated with ozonized saline solution. Full text in Zotero ISCO3 library] Husham A. Razzaq, Mohammad S. Hasan, Muthanna F. Al-Dhalemy, Wurood M. Al-Silaykhee, Hekmat B. Alhmadi, Zaid A. Majeed. Utilization of Ozone as a Complementary Therapy for COVID-19 Patients. <i>International Journal of Psychosocial Rehabilitation</i> , 24(7), 2020. Pp. 10577-10588. DOI. 10.37200/IJPR/V24I7/PR271061
H index 17 PubMed/PMC SCOPUS	[Case Report (3 cases)] Alberto Hernández, Montserrat Viñals, Tomas Isidoro, Francisco Vilás. Potential Role of Oxygen–Ozone Therapy in Treatment of COVID-19 Pneumonia. <i>Am J Case Rep</i> . 2020 Aug 17;21:e925849. doi: 10.12659/AJCR.925849.
CiteScore: 1.0 SNIP: 0.393 SJR: 0.190	[Case Report (1 cases), rectal insufflation] Peña-Lora D, Albaladejo-Florín MJ, Fernández-Cuadros ME, Uso de Ozonoterapia en paciente anciana con neumonía grave por COVID-19, <i>Revista Española de Geriatría y Gerontología</i> . in press (2020), doi: <a href="https://doi.org/10.1016/j.regg.2020.07.005">https://doi.org/10.1016/j.regg.2020.07.005</a>
Undetermined	[37 patients received Ozone I.M. <b>Low quality Scientific Evidence Paper</b> ] David Brownstein, Richard Ng, Robert Rowen, Jennie-Dare Drummond, PA, Taylor Eason, Hailey Brownstein, and Jessica Brownstein. A Novel Approach to Treating COVID-19 Using Nutritional and Oxidative Therapies. <i>Science, Public Health Policy, and The Law. Clinical and Translational Research Volume 2:4-22 July, 2020</i> . <a href="https://www.publichealthpolicyjournal.com/clinical-and-translational-research">https://www.publichealthpolicyjournal.com/clinical-and-translational-research</a>
Undetermined	[Case Report (2 cases)] Schwartz, Adriana and Rosa M <sup>a</sup> Narros. COVID-19 Dermatological manifestations. Presentation of two cases. <i>Ozone Therapy Global Journal</i> , (2020) 10(1): 27-38

**Pre print.**

Schwartz, A.; Martínez-Sánchez, G.; Menassa de Lucía, A.; Mejía Viana, S.; Alina Mita, C. Complementary Application of the Ozonized Saline Solution in Mild and Severe Patients with Pneumonia Covid-19: Efficacy and Tolerability. *Preprints* 2020, 2020060233 (doi: 10.20944/preprints 202006.0233.v1). <https://www.preprints.org/manuscript/202006.0233/v1>

**On review**

Pedro Iván Arias-Vázquez, Russell Arcila-Novelo, María Antonieta Ramírez - Wakamatzu. Is Ozone therapy an adjunct in the treatment for SARS-CoV-2 / COVID-19 infection? *Brazilian Journal of Pharmaceutical Sciences* 2020 (on review)



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**Review Support O<sub>3</sub> Therapy:**

Impact Factor	Paper
5.014 H index 33 Cite Score 3.7	1. Martínez-Sánchez, Gregorio, Adriana Schwartz, and Vincenzo Di Donna. Potential Cytoprotective Activity of Ozone Therapy in SARS-CoV-2/COVID-19. <i>Antioxidants (Basel, Switzerland)</i> 9, no. 5 (6 May 2020). <a href="https://doi.org/10.3390/antiox9050389">https://doi.org/10.3390/antiox9050389</a> . <a href="https://www.mdpi.com/2076-3921/9/5/389">https://www.mdpi.com/2076-3921/9/5/389</a>
2.483 Cite Score 2	2. Alessandra Gavazza, Andrea Marchegiani, Giacomo Rossi, Marianno Franzini, Andrea Spaterna, Sara Mangiaterra, Matteo Cerquetella. Ozone Therapy as a Possible Option in COVID-19 Management. <i>Frontiers in Public Health</i> 2020 Aug 25;8:417. doi: 10.3389/fpubh.2020.00417.
1.575 H index 54 Cite Score 3.5	3. Valdenassi, L., M. Franzini, G. Ricevuti, L. Rinaldi, A. C. Galoforo, and U. Tirelli. 'Potential Mechanisms by Which the Oxygen-Ozone (O <sub>2</sub> -O <sub>3</sub> ) Therapy Could Contribute to the Treatment against the Coronavirus COVID-19'. <i>European Review for Medical and Pharmacological Sciences</i> 24, no. 8 (2020): 4059–61. <a href="https://doi.org/10.26355/eurrev_202004_20976">https://doi.org/10.26355/eurrev_202004_20976</a> .
1.17 H index 41 Cite Score 2.6	4. NUOVA F.I.O. (Italian Oxygen-Ozone Federation), S. Marini, M. Maggiorotti, N. Dardes, M. Bonetti, M. Martinelli, L. Re, F. Carinci, and C. Tavera. Oxygen-Ozone Therapy as Adjuvant in the Current Emergency in SARS-COV-2 Infection: A Clinical Study. <i>Journal of Biological Regulators and Homeostatic Agents</i> 34, no. 3 (28 May 2020). <a href="https://doi.org/10.23812/20-250-E-56">https://doi.org/10.23812/20-250-E-56</a> .
1.02	5. Silvia Menendez-Cepero, José Antonio Marques-Magallanes-Regojo, Alberto Hernandez-Martinez, Francisco Javier Hidalgo Talló and José Baeza-Noci. Therapeutic Effects of Ozone Therapy that Justifies Its Use for the Treatment of COVID-19. <i>J Neurol Neurocrit Care</i> , Volume 3(1): 1–6, 2020. <a href="https://researchopenworld.com/therapeutic-effects-of-ozone-therapy-that-justifies-its-use-for-the-treatment-of-covid-19/">https://researchopenworld.com/therapeutic-effects-of-ozone-therapy-that-justifies-its-use-for-the-treatment-of-covid-19/</a>
0.21 H index 21	6. A, Hernández, Papadakos Pj, Torres A, González Da, Vives M, Ferrando C, and Baeza J. Two Known Therapies Could Be Useful as Adjuvant Therapy in Critical Patients Infected by COVID-19. <i>Revista Española de anestesiología y reanimación. Rev Esp Anesthesiol Reanim</i> , May 2020. <a href="https://doi.org/10.1016/j.redar.2020.03.004">https://doi.org/10.1016/j.redar.2020.03.004</a> .
Undetermined	7. Bilal Mohamad, Ali Obeid. 'Ozone Autohemotherapy: Possible Mechanisms of Anti-Viral Action and Anti Oxidative'. <i>J Infect Dis Epidemiol</i> 6, no. 117. Accessed 25 May 2020. <a href="https://doi.org/10.23937/2474-3658/1510117">https://doi.org/10.23937/2474-3658/1510117</a> .
Undetermined	8. Ricevuti, Giovanni, Marianno Franzini, and Luigi Valdenassi. Oxygen-Ozone Immunocutaneous Therapy in COVID-19 Outbreak: Facts and Figures. <i>Ozone Therapy</i> 2020; 5(1). <a href="https://doi.org/10.4081/ozone.2020.9014">https://doi.org/10.4081/ozone.2020.9014</a> .
Undetermined	9. Farias JBF, Farias APF, Souza AG. Ozone therapy as an adjunct in the treatment to COVID-19. <i>Rev Bras Fisiol Exerc</i> 2020;19(2supl):S5-S8. DOI: <a href="https://doi.org/10.33233/rbfe.v19i2.4116">https://doi.org/10.33233/rbfe.v19i2.4116</a>
Undetermined PubMed/PMC	10. Fernández-Cuadros, M.E., Albaladejo-Florín, M.J., Peña-Lora, D. <i>et al.</i> Ozone (O <sub>3</sub> ) and SARS-CoV-2: Physiological Bases and Their Therapeutic Possibilities According to COVID-19 Evolutionary Stage. <i>SN Compr. Clin. Med.</i> 2(2020): 1094–1102 <a href="https://doi.org/10.1007/s42399-020-00328-7">https://doi.org/10.1007/s42399-020-00328-7</a>
Undetermined	11. Vivian Borroto Rodríguez, Antonio Jiménez Tapia. Ozonoterapia, propuesta justificada para la prevención y rehabilitación en COVID-19 [Ozone therapy, a justified proposal for the prevention and rehabilitation in COVID-19] <i>Revista Cubana de Medicina Física y Rehabilitación</i> . 2020;12(3):e520 <a href="http://www.revrehabilitacion.sld.cu/index.php/reh/article/view/529">http://www.revrehabilitacion.sld.cu/index.php/reh/article/view/529</a>
Undetermined	12. Vivian Borroto Rodríguez, Antonio Jiménez Tapia, María Esther Dragustinovis Ruiz. Ozonoterapia enteral: una posible opción segura y económica para pacientes COVID-19 [Enteral Ozone Therapy: a Possible Safe and Economical Option for COVID-19 Patients] <i>Revista Cubana de Medicina Física y Rehabilitación</i> . 2020;12(3):e535 <a href="http://www.revrehabilitacion.sld.cu/index.php/reh/article/view/535">http://www.revrehabilitacion.sld.cu/index.php/reh/article/view/535</a>
Pre-print 2020	1. Ranaldi, G. T., M.D., Villani, E. R., & Franza, L. (2020, May 8). Ozonotherapy: a multirole weapon, topical pathway against SARS-COV-2. <a href="https://doi.org/10.31226/osf.io/n2dup">https://doi.org/10.31226/osf.io/n2dup</a>



## Paper again the use of ozone therapy

Impact Factor	Paper
1.304	López Reboiro, C. Sardiña González, J. López Castro. COVID-19 and Argumentum ad ignorantiam or «not everything goes» [COVID-19 y Argumentum ad ignorantiam o «no todo vale»] Revista Clínica Española. DOI: 10.1016/j.rce.2020.04.013. <a href="https://www.revclinesp.es/es-covid-19-argumentum-ad-ignorantiam-o-avance-S0014256520301223?referer=buscador">https://www.revclinesp.es/es-covid-19-argumentum-ad-ignorantiam-o-avance-S0014256520301223?referer=buscador</a>

## rectal insuflación

	Conc.	Vol.	Dose (mg)
Day 1 / 2	20	100	2
Day 3 / 4	25	150	3.75
Day 5 / 6	30	150	4.5
Day 7 / 8	35	200	7
Day 8-14	40	200	8

**1 every 12 h for 14 days**

Hernández Rosales *et al.* (2005) Ozone therapy effects on biomarkers and lung function in asthma. *Archiv of Medical Research* 36 (5):549–54  
Mawsouf M.N *et al.* Ozone Therapy in Patients with Viral Hepatitis C. Ten Years' Experience (2012). *Ozone: Science & Engineering* 34: 451-458  
Viebahn-Hänsler *et al.* (2016). Ozone in Medicine: Clinical Evaluation and Evidence Classification of the Systemic Ozone Applications, Major Autohemotherapy and Rectal Insufflation, According to the Requirements for Evidence-Based Medicin. *Ozone: Science & Engineering*, 38 (322-345).

## Minor Autohemotherapy (self-vaccine)

5 mL Blood + 5 mL O<sub>3</sub> 90 µg/mL, Once a week for 4 weeks.

Bocci V. *et al.* (2010) Ozonation of human HIV-infected plasmas for producing a global vaccine: How HIV-patients may help fight the HIV pandemia. *Virulence* 1(3) 215-217.

*Archiv of Medical Research* 2005, 36 (5):549–54 // *Virulence* 1(3), 2010: 215-217. // *Ozone: Science & Engineering* 2012,34: 451-458 // *Ozone: Science & Engineering*, 2016 38 (322-345).