



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

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

The up-date of these recommendations take into consideration the preliminary results listed in “ISCO3 follow-up of the original paper with outcomes”.

<b>ISCO3 Theoretical protocol for Intervention in case of Mild /Moderate /Severe COVID-19 + CRITICAL O<sub>2</sub>/O<sub>3</sub> NON-considering</b>	<b>O<sub>3</sub>SS 5 → 3 µg/mL (bub.) 250 mL, Daily x 10 d Or MAH Blood vol. 100 mL.</b> Only in patients with normal d dimer values O <sub>2</sub> /O <sub>3</sub> : Blood 1:1. Daily for 5 days + 3 weekly x 10/14 days. First week 30 µg/mL, last 45 µg/mL or EBOO (not yet outcome)	Consider glutathione 1.2 g or / and Vitamin C 1-3 g in 100 mL of saline. Two times a week for 4 weeks Prelim. Data Indicate ↑ success of O <sub>3</sub> SS																								
<b>Intervention alternative when O<sub>3</sub>SS or MAH are not available RIO<sub>3</sub>: 1 every 12 h for 14 days</b>	<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> <b>+ MiAH</b> 5 mL Blood + 5 mL O <sub>3</sub> 90 µg/mL, Once a week for 4 weeks.	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	<b>Support:</b> 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).  <b>Oral Therapy:</b> Probiotic plus supplementation proposed in Prevention protocol ↓
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<b>ISCO3 Theoretical protocol for Prevention</b> Medical doctor or occupational risk people	<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. Or <b>Rectal insufflation</b> 3 times a week 40 µg/mL /100 mL	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.																								
<b>ISCO3 Theoretical protocol for Recovery</b>	<b>Rectal insufflation</b> 2 times a week 30 µg/mL /100 mL, to complete 20 sessions, then 2 months off. Repeat treatment cycles until complete remission	<b>Oral:</b> Once a day: N-acetyl cysteine 600 mg 30 days off / 30 days on, plus Vit.D 2000 UI (o 50 µg). Twice a day Vit. C 300 mg, Zn 5 mg. Melatonin 3/5 mg 30 min before sleep.																								
<b>Personal Protective Equipment Disinfection</b>	<b>O<sub>3</sub> concentration &gt;15 µg/mL</b> <b>Contact time:</b> >10 min <b>Humidity:</b> 99 %	<b>Ref:</b> Antioxidants 2020, 9, 1222; doi:10.3390/antiox9121222																								

### Ozone in Personal Protective Equipment Disinfection

Bernardino Clavo, Elizabeth Córdoba-Lanús, Francisco Rodríguez-Esparragón, Sara E. Cazorla-Rivero, Omar García-Pérez, José E. Piñero, Jesús Villar, Ángeles Blanco, Cristina Torres-Ascensión, José L. Martín-Barrasa, Jesús M. González-Martin, Pedro Serrano-Aguilar and Jacob Lorenzo-Morales. Effects of Ozone Treatment on Personal Protective Equipment Contaminated with SARS-CoV-2. Antioxidants 2020, 9, 1222; doi:10.3390/antiox9121222

Angeles Blanco, Francisco de Borja Ojembarrena, Bernardino Clavo, Carlos Negro. Ozone potential to fight against SAR-CoV-2 pandemic: facts and research needs. 2021 Jan 2;1-15. Environ Sci Pollut Res Int doi: 10.1007/s11356-020-12036-9.

### Ozone in Environments Disinfection

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Zucker, Ines; Lester, Yaal; Alter, Joel; Werbner, Michal; Yecheskel, Yonin; Gal-Tanamy, Meital; Dessau, Moshe. Pseudoviruses for the assessment of coronavirus disinfection by ozone. Environ Chem Lett; 1-7, 2021 Jan 13.

### Reference:

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Jeffrey I Mechanick et al. Clinical Nutrition Research and the COVID-19 Pandemic: A Scoping Review of the ASPEN COVID-19 Nutrition Taskforce JPEN J Parenter Enteral Nutr. 2020 Oct 23. doi: 10.1002/jpen.2036. Online ahead of print.

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### Preprint / Preliminary

Fedorova T.A., Bakuridze E.M., Yesayan R.M., Kozachenko I.F., Nikolaeva A.V. Application of ozone therapy in the complex treatment of patients with COVID-19 (Preliminary results). FSBI NMITS AGP named after V.I. Kulakov "Ministry of Health of Russia, Moscow. [Ozone therapy SSO3 was given to 134 patients (patients' age - from 18 to 94 years).

Sharma A, Shah M, Satya Lakshmi, Sane H, Captain J, Gokulchandran N, Khubchandani P, Pradeep, M.K, Gote P, Tuppekar B, Kulkarni P, Paranjape A, Pradhan R, Varghese R, Kasekar S, Nair V, Khanbande. A Pilot study for treatment of COVID-19 patients in moderate stage using Intravenous administration of Ozonized saline as an adjuvant treatment- Registered Clinical Trial. Journal of Biological Regulators & Homeostatic Agents. Submitted

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