

## **Data Based On Zelenko Protocol Passes Peer Review**

### **COVID-19 Outpatients - Early Risk-Stratified Treatment with Zinc plus Low-Dose Hydroxychloroquine and Azithromycin: A Retrospective Case Series Study**

**By Roland Derwand, Martin Scholz, Vladimir Zelenko**

**Conclusion:** Early treatment of COVID-19 in high risk patients with “The Zelenko Protocol” decreased hospitalizations by 84% and resulted in a 5 fold reduction in death.

**New York, NY.** October 27, 2020 – Dr. Vladimir Zelenko and team announced today that a retrospective study analyzing his patient data was accepted for publication after a rigorous peer review process.<sup>1</sup> The study finds that early intervention and treatment of high-risk patients with COVID-19 resulted in significantly fewer hospitalizations and deaths. The treatment consisting of zinc, low-dose hydroxychloroquine and azithromycin, is also referred to as “The Zelenko Protocol.”

This study is unique because only HIGH RISK out-patients were treated with the triple-drug regimen. High-risk patients are those that have a 5% to 10% chance of dying from COVID-19. This category includes patients who are older than 60, who are younger than 60 but have other medical issues, or who have trouble breathing. All identified high-risk outpatients were treated at their initial visit, most within the first five days of the onset of symptoms. All of these patients had laboratory confirmation of COVID-19 infection.

The results show that in 141 high risk patients who were treated in the prehospital setting with the triple therapy, only 2.8% (4/141) were hospitalized compared to 15.4% of an untreated control group (58/377) (odds ratio 0.16, 95% CI 0.06-0.5;  $p < 0.001$ ). Only 0.71% (1/141) patients died in the treatment group, versus 3.5% (13/377) in the untreated group (odds ratio 0.2, 95% CI 0.03-1.5;  $p = 0.12$ ).

This retrospective analysis is the product of the unique collaboration of three doctors with a rare synergy of industry, academia and clinical medicine. Dr. Roland Derwand is a German physician and life science industry expert. Professor Martin Scholz is an independent consultant and

adjunct professor for experimental medicine at Heinrich Heine University, Düsseldorf, Germany. Drs. Derwand and Scholz were the first to draw attention to “The Zelenko Protocol” in their published hypothesis paper about the importance of combining zinc with hydroxychloroquine as a method for treating COVID-19.

“What differentiates this study is that patients were diagnosed very early with COVID-19 in an outpatient setting, and only high-risk patients were treated early on,” said Dr. Derwand. “Unfortunately, we seem to have forgotten common medical knowledge - that we want to treat any patient with an infectious disease as soon as possible. Dr. Zelenko treated his high-risk patients immediately with the three drug regimen to ensure sufficient efficacy. He correctly didn’t wait for the disease to further develop.”

Following the rigorous peer review process, Dr. Zelenko said: “It’s unfortunate that much of the media coverage surrounding hydroxychloroquine has been negative. These three medications are affordable, available in pill form, and work in synergy against COVID-19.” According to Dr. Zelenko: “Hydroxychloroquine’s main role is to allow zinc to enter the cell and inhibit the virus’ reproduction. And azithromycin prevents secondary bacterial infection in the lungs, and reduces the risk of pulmonary complications.”

The third author, Professor Scholz added: “This is the first study with COVID-19 outpatients that shows how a simple-to-perform outpatient risk stratification allows for rapid treatment decisions shortly after onset of symptoms. The well-tolerated 5-day triple therapy resulted in a significantly lower hospitalization rate and less fatalities with no reported cardiac side effects compared with relevant public reference data of untreated patients. The magnitude of the results can substantially elevate the relevance of early use, low-dose hydroxychloroquine, especially in combination with zinc. This data can be used to inform ongoing pandemic response policies as well as future clinical trials.”

Especially as vaccines will still not be available during the currently ongoing second wave of the pandemic a broader use of the Zelenko protocol to treat positively risk stratified COVID-19 outpatients as early as possible seem to represent a so far underestimated additional option to win today's battle against COVID-19.

- 1) Derwand, R., Scholz, M., Zelenko, V. COVID-19 outpatients – early risk-stratified treatment with zinc plus low dose hydroxychloroquine and azithromycin: a retrospective case series study. *Int. J. Antimicrob. Agents*, available online 26 October 2020, <https://doi.org/10.1016/j.ijantimicag.2020.106214>

### **About Dr. Roland Derwand**

Based in Munich, Derwand is a medical doctor and life science industry expert with almost 20 years of experience. He currently heads the medical affairs department of a U.S. biotech company in Germany. His engagement and contribution to this study has been private and independent. Before he held various positions in the pharma and biotech industry with national, European and global responsibilities. He holds an M.D. from Johannes Gutenberg University in Mainz, Germany, an MBA from the PFH Private University of Applied Sciences in Göttingen, Germany, and he did his doctorate in cardiovascular physiology.

### **About Professor Dr. Martin Scholz**

Scholz holds a doctorate degree (Ph.D.) from Johann Wolfgang Goethe –University, Frankfurt am Main, Germany and is an adjunct professor for experimental medicine at Heinrich Heine University Düsseldorf. He also serves as managing director of the “Starts- and -Ups Consulting” company. Prior to this, Scholz served as the chief scientific officer on the executive board of LEUKOCARE AG, a biotech company he founded in 2001. Scholz received the title “professor honoris causa” at the Faculty of Medicine Marilia (FAMEMA) in São Paulo, Brasil.

### **About Dr. Vladimir Zelenko**

Zelenko graduated from SUNY at Buffalo School of Medicine in 2000. He is Board Certified in Family Medicine with 20 years of clinical experience.