

Suggested protocol for the use of Silver-sol in the compassionate treatment on compromised patients infected with SARS-Cov2 (Covid 19 / Corona)

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Introduction The SARS-Cov19 Virus (Corona) continues globally to capture its' toll both in human misery and financial disaster. Having infected more than 22 million people with almost one million deaths, the developing vaccines have still been unproven. Many more people, particularly those with debilitating disease, with a medical history of concern or a chronic illness could fall victim of Corona before the vaccines are readily available. Time is **not** on our side and therefore as often is the case in making medical decisions logical risk management may be of advantage.

Abstract. Preclinical observations indicated the possible use of the Nano Silver Hybrid of ABL Medical, Utah, USA, against viral conditions¹. A number of articles and reviews have been written on A(H1N2), A(H3N2), A(H5N1) and A9H5N2). Apart from the Corona virals Avian Flu, Swine Flu and the findings of ABL regarding SARS-Cov1 none other had been tested.¹ An in vitro test was performed by a team of Daniel T. Stein, MD, Professor of Medicine at the Biomarker Analytical Research Core Laboratory and Biorepository, Institute for Clinical and Translational Research, Albert Einstein College of Medicine, Bronx, NY. The first results are very promising². After the pretreatment of two differing samples of the virus surrogate for one hour and then diluting/spiking the virus samples 1:10 into the medium, after one hour an 85% reduction in infectivity of pseudo Corona viruses was found at both 10 and 30-ppm concentration of the Nano Silver Hybrid solution. This was even more effective in the benign VSV virus showing a 96% reduction after one hour. There were no apparent effect of cytotoxicity.

Note-The Vesicular Stomatitis Virus platforms (VSV) are used for surrogates of SARS-Cov2 and other Corona viruses.

1. The problem

To overcome the Pandemic Corona/ Covid-19 much attention and research was and still is given to the production of a vaccine. This requires both investment and time until one can be sure of safe and effective outcomes. Until achieved a more specific treatment would help overcome the prevalence of morbidity and mortality. This would assist in Herd Immunity, albeit less than a vaccine. Life would never the less gradually return to normal. A major problem with infection recognized to date is the Cytokine Storm effect brought about by the Bio-Burden. The Nano Silver Hybrid dramatically reduces the Bio-Burden. It has recently been found ⁴ that a major route of entry of the SARS-Cov2 is via the upper nasal passage (the Uncinate Process). It is important to have anti- viral activity in the upper nasal passage where a large number of ACE2 receptors exist (the purported reason

for loss of smell and taste). Hence, the use of the nebulizer and nasal spray as a prophylactic appears to be relevant.

2. A possible solution

As stated above, much investigation and research has gone into the antimicrobial effect of the Nano Silver Hybrid of ABL Medical. The promising results of Prof. Daniel Stein² have opened a window of optimism and it's hoped we can proceed with a compassionate study on compromised patients. If successful, other patients could be included. Additionally it could be used as a prophylactic against infection- reducing the bio burden if infected⁴. The treatment is safe, (see below) inexpensive and readily available. The only apparatus required is a micronized nebulizer. Prof Stein illustrated that using the 10- ppm Nano Silver Hybrid of ABL Medical 86% and 98% reductions were observed after one hour (figure 1).

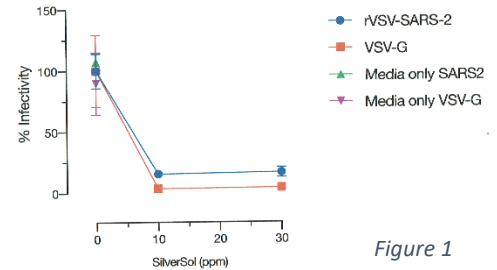


Figure 1

The rVSV-SARS-2 refer to the Vesicular Stomatitis Virus which is used as a platform for surrogate SARS-Cov2.

The VSV-G refers to the benign Vesicular Stomatitis Virus G protein, which is used as a platform for Benign surrogate SARS-Cov2.

3. The Risks involved are minimal if at all. Reference has been given to this in depth in the article reference ¹ below. It is worthy to add that the solution of 10- ppm has been used as a prophylactic nasal spray for more than 5 months any without side effects or Covid 19 infection³. It is also on record ⁵ in a paper to be published by Dr. D.Prado, that 1cc of a 30-ppm solution of the Nano Silver Hybrid was given to 600 patients for pulmonary conditions. More recently a highly debilitated patient showed respiratory improvement after 3 hours of treatment. No toxic effects were observed⁵.

4. The proposed protocol and rationale

Please note; The following protocol is based solely upon my assessment as a pharmacist having knowledge of the pharmacology (kinetics and dynamics) and the correct use of medication. I am not as a physician and it is advisable to have available a Pulmonologist or physician with the necessary professional and clinical experience for endorsement and recommendations to this Protocol. My recommendations for the protocol are in line with those of the study that Prof. Stein² and Dr. Prado⁵ carried out.

Whilst this protocol is intended for compromised patients qualifying for compassionate treatment, they could of course be used for anyone suffering from Covid-19, the lower dose of once a day could be used as a prophylactic regime. However, we are in uncharted territory and a deal of clinical assessment is advised and is necessary. Such an example of a professional decision would be if the patient requires a lung suction before treatment.

Protocol:

Apparatus and preparation

1. The use of micronized nebulizers is preferred over steam inhalers due to the volume of solution inhaled and the particle size.
2. Overheating the solution could be detrimental to the Nano Silver Hybrid.
3. Do **NOT** mix the Nano Silver Hybrid solution with saline or any other diluent since this could precipitate and deactivate the Nano Silver. It comes prepared with highly purified water.
4. Check sputum volume colour and consistency to aid assessment of the dose volume. If we introduce 2cc of solution, the sputum volume should be as much or more to clear the lungs. More than 2 cc may compromise still further a patient with COPD (Chronic Obstructive Pulmonary Disease) or some other Pulmonary Condition. Caution is therefore advised.
5. Monitor Oxygen levels using an Oximeter to help decide if to lower the dose intervals.

The Dose Regime

1. Commence by using a 10 PPM solution of the Nano Silver Hybrid as follows;-
 - i) 2cc SIX (6) times daily (every 4 hours). If the blood Oxygen level is below 90% consider dosage every 3 hours
 - ii) If the blood Oxygen level increases to >90%, a reduction to every six hours could be considered.
 - iii) If the blood Oxygen level is > 94% a reduction to every 8 hours could be considered. This dose interval should remain until the patient breaths freely, unaided with other Covid-19 symptoms reduced to an acceptable level.
 - iv) After being symptom free for 3 days the patient should be tested for the infection before discharge from hospital is considered.
 - v) On discharge, the patient should be breathing freely and if coughing the sputum should be clear and freely removed.

It is noted that Dr. Prado used 1cc of a 30-ppm solution every three hours and as such this dose could be considered if the inhaled volume needs to be reduced or the condition of the patient worsens.

References

1. Attached paper with references- Rice H, "A novel proposed way of overcoming infections causing morbidity and mortality from SARS-Cov
2. Personal communication Daniel T. Stein, MD, Professor of Medicine, Scientific Director, Biomarker Analytical Research Core Laboratory and Biorepository, Institute for Clinical and Translational Research, Albert Einstein College of Medicine, Montefiore Medical Center
3. Personal communication ABL Medical- Use of Silver-Sol at a Biotech plant in California, USA.
4. Andrew P. Lane, Mengfei Chen, Johns Hopkins University School of Medicine, Baltimore, USA. European Respiratory Journal,08.2020
5. Personal communication of ABL Medical with Dr.D. Prado (Envita Medical Center, Scottsdale, AZ, USA)