

A novel Proposed way of overcoming infections causing morbidity and mortality from  
The virus SARS-Cov 2 and the disease Covid-19

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Introduction

A pandemic affecting lives with economic and social shutdowns has fallen upon the entire world at relentless speed, taking all health care systems off their guard and unprepared for the enormity of the panic and reality. The snowball effect could affect entire populations and their ways of life could-as we know them, be changed completely.

This unprecedented situation demands unprecedented approaches in solving the problem. By understanding the pathway of infection, how it affects us provides a proposed way of overcoming this global threat. To accomplish this goal the regulatory authorities must do away with much red tape in authorizing immediate approval of non-toxic, non-invasive procedures whose feasible solution could well reduce morbidity and mortality. We herewith propose such a procedure.

Abstract

The use of Silver in Nano Particles has long been advocated and accepted as anti-viral.<sup>1,2,21,24</sup> The more so if the possibility of lysis and other cell destruction of the virus is increased by the correct size of the Nano particle. The major antiviral mechanism of Ag Nano particle is likely the physical inhibition of binding between the virus and host cell. It has been shown that Nano Silver has destructive effect on the virus membrane glycoprotein knobs (spikes) characteristic of the Corona viruses as well as their cells<sup>7</sup>. This is enhanced by the hybrid of the Silver Ag<sup>+</sup> atoms by Tetra Silver Tetra Oxide (Ag<sub>4</sub>O<sub>4</sub>). (Fig 1 & Fig 2) This combination is to be found in the 32 parts per million of 0.1 NM in length Nano preparation of Silversol (ABL Utah USA)<sup>3</sup> whose active antibacterial effect has been well established<sup>14</sup>.

Mechanism of viral and anti-viral activity

It has been shown that the SARS-Covid2 virus affects the Cilia forming cells in the lungs – all coronaviruses bring about respiratory diseases and the novel coronavirus appears to follow the patterns of other SARS viruses, as was quoted by the University of Maryland School of Medicine associate professor Matthew B. Frieman<sup>4,5</sup> who widely studies highly pathogenic coronaviruses. In the early days of an infection, the SARS-Cov2 rapidly invades human lung cells. The lung Alveolus cells fall in two classes. Type 1 is responsible for gas transport whilst Type 2 prevents atelectasis by producing surfactants, mucus and repair of Type1 cells. The Respiratory Epithelium produce cilia and mucous. SARS was found to damage the Cilia cells<sup>4</sup> and Type 2 since the viral spikes enter via the ACE2 receptors therein. If the cilia are infected the mucous cannot be removed from the lungs and the Type 2 cells will not prevent atelectasis the patient tries to cough up mucous but unsuccessfully thereby producing the dry cough. The shortness of breath and dry cough are well noted amongst the symptoms of Covid 19. Other pathogenically occurrences take place such as micro-thrombosis<sup>26</sup> and as time passes many more will be found. The bio-burden of the virus creates a Cytokine Release Syndrome (CRS or Cytokine Storm) which adds to the malaise symptoms of the patient so well observed in patients with the SARS-Cov2 infection. The viral RNA enters the host cytoplasm desisting protein synthesis and

preventing villi production. Most present Anti-Viral agents work on changing the DNA/RNA preventing further virus development and thus multiplication (forming new generations of virions). The Coronaviridae of which the SARS-Cov2 belongs, have in common an outer lipid protective “shell” which softens and eventually melts away at temperatures above 37 to 38 °C, (the temperature at the lower lung is 37.1°) allowing the glycoprotein spikes to penetrate the host cells. These same ACE2 receptors are found in the nasal passage and it is postulated that the virus can enter the system via the nose- hence the smell impairment<sup>30</sup>. The temperature in the nose however is too low to melt the was coating of the virus but in the Uncinate Process, where the openings of the Frontal and Maxillary sinuses are located the temperature may well be above 37° C so the virus can enter the system. It is at this stage that the Nano Silver comes into play. The virus has no protective shell. The medication hybrid remains active in a moist atmosphere, remaining potent for up to 36 hours since the electrons released from the Nano Silver/Tetra Silver Tetra Oxide return to their atoms to neutralize the positive charge on the molecule after the electron had been thrown off to lyse the virus<sup>12</sup>. The Silver throws off the single electron from its’ 5<sup>th</sup> annular ring, creating a higher negative charge due to an extra electron attaching itself to the virus and after lysis occurs (electrocution!)<sup>24</sup> the Silver and Ag<sub>4</sub>O<sub>4</sub> hybrid draw back the excess electron to neutralize the Ag atoms whose 5<sup>th</sup> annular is short of its’ electron. The 5<sup>th</sup> annular ring of the Ag<sup>+</sup> atom has only one electron that by centrifugal force is released when the annular become an ellipse and the centrifugal force is greatest and then it is drawn back when the annular become circular.(a property of the Silver annular movement) All this takes place in a miniscule of a second.

The inactivation of the virus is by a number of pathways. The Nano Particle Silver kill off the virus by “electrifying” them<sup>24</sup>thus preventing them from penetrating cells with their viral membrane glycoprotein knobs preventing them from attaching to the host cell, releasing their RNA into the host cells, assemble viral components into new viruses and thereafter release the new virions into the body. Nano Ag exhibits an inhibition on RNA polymerase activity and overall RNA transcription through direct Ag binding to RNA polymerase, being separated from the cytotoxicity pathway induced by Ag ions<sup>29</sup>. It has also been demonstrated that the Oscillating Resonant Frequency 890-910 THz emitted by the Silver atom can break down biofilm and function without contact-as with UV light.<sup>21</sup>

This Silver Hybrid’s action on the virus is neither on the Furin deactivation system of lung, ilium or liver tissue (used for protein synthesis completion) nor on the ACE2 receptors (used as a point of entry of the viral spikes<sup>22,23</sup>) which were mistakenly purported to increase with the patient taking ACE and ARB inhibitor medications) but (postulated as) rather by electron displacement from the Ag atom to the virus and then its return back to the Ag<sup>+</sup> atom. All this takes place in milliseconds-having added an extra electron and causing lysis of the virus and thus its immobilisation<sup>24</sup>.

Many articles have been written on the efficacy of Nano Particles of Silver and Swine Flu A(H1N1)19 and A(H3N2), HIV 9 ,Avian flu9 A(H5N1) and A(H9N2)18 and Hepatitis. 10,21 Treatment of Corona viruses other than Swine and Avian Flu have as yet not been reported in vivo, yet one can assume that their effects are similar since they are all of similar subtypes<sup>11</sup>. Unpublished reports from ABL indicate that their Hybrid of Ag<sub>4</sub>O<sub>4</sub>/ Ag effectively destroys 99% of the 2003 SARS-CoV1 in vitro within an hour at a dilution of 10 ppm using the Nano Silver complex mentioned above.<sup>20</sup> The size of the SARS-Covid2 is 80-160nm and has a positive polarity (a single band only of RNA gene)- this facilitates an

increased possibility of the Nano Silver electrons causing lysis. The Nano particles used in the inhalation are well below the 10 nm- known to maximize the efficacy of the anti-viral activity. This small and optimal size is required to reach more infected areas and has proven to be antiviral to many viral strains <sup>13</sup>.

#### Proposed use of inhaled aqueous solution Ag NP /Ag<sub>4</sub>O<sub>4</sub> hybrid

An aqueous solution Ag NP/Ag<sub>4</sub>O<sub>4</sub> hybrid inhaled as an aqueous solution in High Quality Plastic vials (glass has been found to leach out Silver ions<sup>15</sup>) of 2cc (without the addition of any other APIs) of between 20 to 30 parts per million all at < 10 NM, should be inhaled 5-6 times daily using a micronized vaporizer to eliminate the virus. A simple nasal spray could be used if necessary. The solution should be kept below 50<sup>0</sup> C to avoid reducing the efficacy of the Ag NP <sup>18</sup>. On the second day the dose should be 2cc 4 times daily until there is an improvement in coughing – the cough being productive with mucous and less frequent. Thereafter the dose should be 3 times daily until the lungs are clear and sputum can be released freely. Finally the dose should be twice daily until symptoms have disappeared. The clinical picture should improve since the bio-burden will have been reduced to numbers that the immunological system can control. Actual clinical assessments of course will throw more light on the best dosage regime. By eradicating the virus and preventing the virus from multiplying (lysis) the patient stops the progress of the disease. As stated the bio-burden is reduced /eliminated allowing the body's immunological system to take control over the infection. The cilia producing cells in time will reproduce anew and the patient will recover. The solution is non toxic<sup>6</sup> and can be taken orally with no danger of toxic effects as reported in a detailed Peer Reviewed paper<sup>6</sup>. There are also reports endorsing the safety of the Ag NP when used via the intranasal route<sup>16,21,27</sup> and it is some 3000 times below the 100 microgram per liter quoted as being a safety limit for Nano particles of Silver, besides the Ag<sub>4</sub>O<sub>4</sub> provides a “capping agent to the complex” further preventing toxicity<sup>21</sup>. The use of Nano silver in pulmonary conditions has also been found to be non- toxic and non-inflammatory and is well endorsed in the literature <sup>25</sup> It is indeed noteworthy that even its use in the eyes at the dilutions used above (32 PPM) for non- chronic use has also been found<sup>28</sup>.

Conclusion The use of Ag NP for the treatment (not inoculation) of Covid-19 provides a non- toxic, non- invasive approach coupled with the evidence both in the literature and many clinical settings, a likely successful treatment for patients not responding to treatments of a virus hitherto un- investigated sufficiently so as to provide a speedy recovery. It can also be used as an adjunct addition of Broncho Dilators between doses if required. It appears that there is nothing to lose and perhaps a lot to gain by using this proposed method. The risks are minimal the preparation having been assessed by the FDA as non- toxic for topical use and there is ample endorsement for its' safe internal use. Alternative treatments have as yet not been as successful as hoped. The cost are minimal and potential speed of treatment and recovery promising. Vaccines are long in coming.

#### Authors note

At this critical time ,with this logical approach, explanations using reliable references and recommendations it is respectfully requested that, with your help we can introduce this

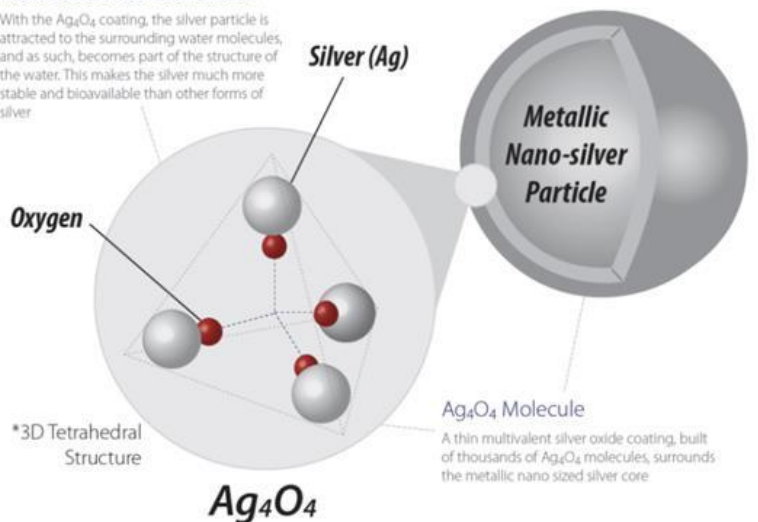
treatment in helping to cure and prevent the spread of the disease Covid -19 by the virus SARS CoV2 which is causing so much global disruption.

Declaration The author is the CEO of A.B.Tilary Ltd (Israel) who are the agents for ABL Medical, Utah, USA, the manufacturers of the Nano Particle Silver Hybrid referred to in this article. A.B.Tilary have a registered gel AMAR in Israel (#27620001) that will shortly be put on the market containing the same API complex.

**Metallic Nano Particle + Ag<sub>4</sub>O<sub>4</sub>**  
(Multiple Modes of Action)

**More Stable and Bioavailable**

With the Ag<sub>4</sub>O<sub>4</sub> coating, the silver particle is attracted to the surrounding water molecules, and as such, becomes part of the structure of the water. This makes the silver much more stable and bioavailable than other forms of silver

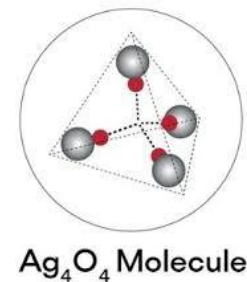


**Not Metabolized**

Metallic silver particles are not metabolized by the body and have not been found to build up in the body and cause argyria

**Fig 1**  
(Taken from ABL files)

**Fig 2**



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