Brief Survey of Literature
Regarding Efficacy of Silver and Copper Ions Against 2019 Novel Coronavirus

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The recent outbreak of 2019 Novel Coronavirus (2019-nCoV) has caused much concern as a worldwide health threat. The World Health Organization (WHO) says that for nations outside China now is a "window of opportunity" to prepare for the threat and urges all nations to "be as aggressive as possible" in their preparations.[1,2]

Problem:

A primary mode of transmission is via contaminated environmental surfaces (such as bedside tables, bed rails, and other objects in the patient vicinity).[3] In fact, the virus can persist on surfaces for up to nine days.[3] The WHO and the U.S. Centers for Disease Control and Prevention (CDC) therefore recommend adopting procedures to keep high touch surfaces free of the virus.[4,5]

Solution – Silver/Copper:

Experts advise that using any antimicrobial agent that is effective against enveloped viruses would be "sufficient to significantly reduce the risk of infection" from the novel coronavirus.[6] Many studies have demonstrated the significant efficacy of silver and copper ions against several types of viruses, including coronaviruses and influenza which are both enveloped single stranded RNA viruses (ssRNA).[7-9] The anti-viral effect is believed to be due to the ions' ability to interact with viral surface (envelope) proteins thereby disrupting the virus's ability to enter the human cell.[10,11] Silver and copper products which specifically target the "high touch" surfaces known to be integral to disease transmission, are especially useful as they provide continuous, consistent antiviral activity over an extended period.

Conclusion:

Antimicrobial products utilizing silver and copper ions have antiviral efficacy against enveloped respiratory viruses like coronaviruses and influenza. Efforts to reduce the transmission of 2019 Novel Coronavirus (2019-nCoV) via contaminated environmental surfaces would likely benefit from the use of silver and copper ion technologies particularly self-cleaning technologies used on high touch surfaces where viruses may remain viable for prolonged periods.

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