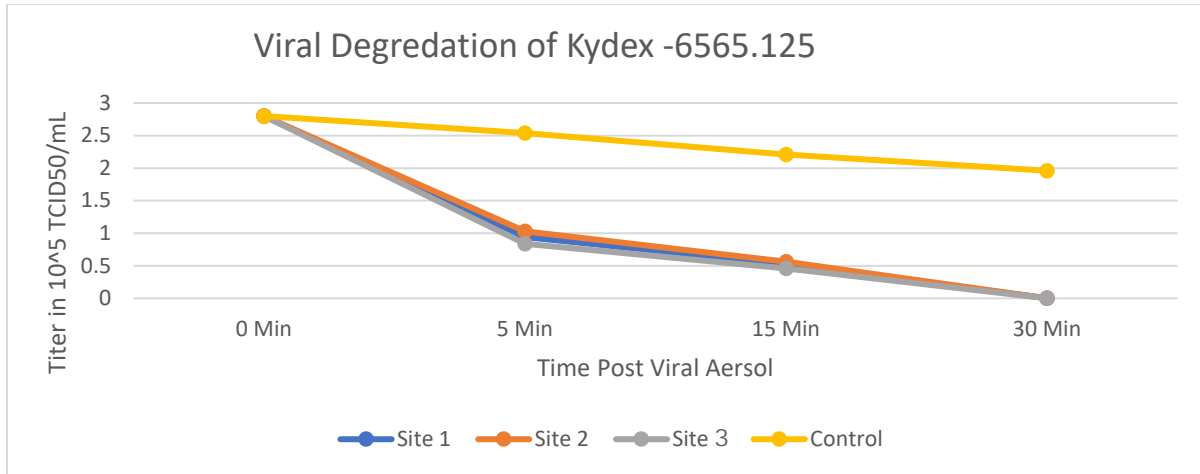


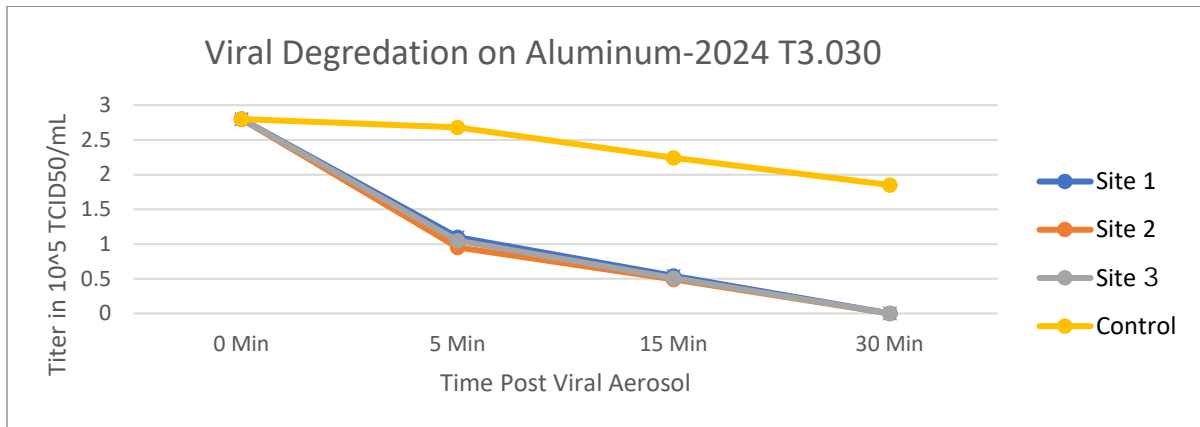
Each of the 3 testing sites were simultaneously and equally subjected to a 3ml aerosol or viral media containing a known titer of 2.8×10^5 TCID50 per mL to ensure saturation of all materials.

EFFICACY TESTING:

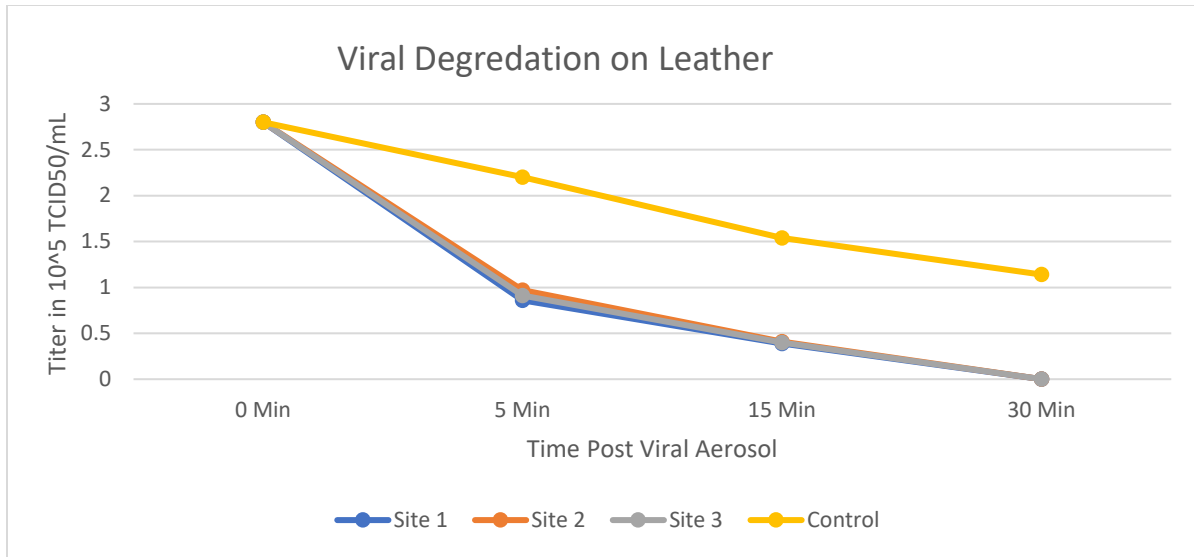
Viral media with a known concentration was applied via aerosol to the materials in 3 locations throughout the containment unit and exposed to bipolar ionization for a period of 5, 15, and 30 minutes. Swabs were taken of all material and cultured by the same means as the original viral titration performed on the BEI Resources provided SARS-CoV-2 USA-WA1/2020 viral culture. Preliminary results are as follows



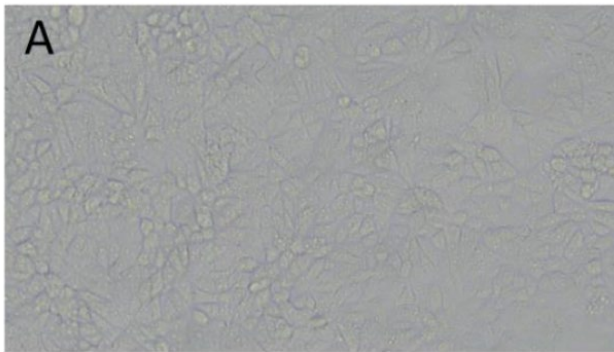
Kydex Log10 Reduction from 0 min to 30min Site 1: 3.75, Site 2: 3.7, Site 3: 3.71 Control: 0.15



Aluminum Log10 Reduction from 0Min to 30 min: Site 1: 3.73, Site 2: 3.65 Site 3: 3.61 Control: 0.18



Leather Log₁₀ Reduction from 0 min to 30 min: Site 1: 3.72, Site 2: 3.75, Site 3: 3.75 Control: 0.39



Ver06 Cells – Post Infection with deactivated virus



Ver06 Cells and 150uL Control Virus

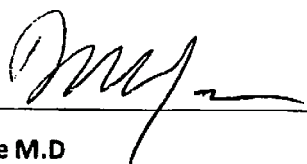
CONCLUSIONS:

As it pertains to Aluminum-2024 T3.030: the increase in ion concentration had an increased effect on peplomer binding as expected. After 30 minutes, the overall average decrease in active virus was 99.89%. The control sample showed the expected natural degradation give the materials inoculated. Given the specific environment this was tested in, the quality of the materials, and the method in which the virus was dispersed, it is safe to say that the bipolar ionization system used in this experiment has the ability to deactivate SARS-CoV-2 with the given ion counts.

As it pertains to Kydex-6565.125: the increase in ion concentration had an increased effect on peplomer binding as expected. After 30 minutes, the overall average decrease in active virus was 99.99%. The control sample showed the expected natural degradation give the materials inoculated. Given the specific environment this was tested in, the quality of the materials, and the method in which the virus was dispersed, it is safe to say that the bipolar ionization system used in this experiment has the ability to deactivate SARS-CoV-2 with the given ion counts.

As it pertains to Leather: the increase in ion concentration had an increased effect on peplomer binding as expected. After 30 minutes, the overall average decrease in active virus was 99.99%. The natural degradation of the control was expedited leaving the assumption that residual chemicals used to treat the material or the porous surface may have played a larger factor in either the degradation or our inability to collect all of the sample use for inoculation.

- **Additional testing was performed in correlation with Innovative Bioanalysis, LLC and can be provided upon request. The data from this experiment showed a negligible difference in total active viral count and can be considered closely comparable.**



Dr. Dana Yee M.D

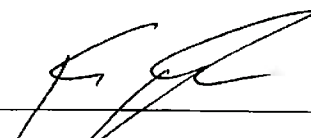
SigPlus1 or


08/07/2020 02:17:17 pm

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Chief Biosafety Officer, Innovative Bioanalysis



Kevin Noble
Chief Operating Officer, Innovative Bioanalysis

07 AUG 2020

Date

Date

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07 Aug 2020

Date