军事医学科学院
微生物流行病研究所

检　测　报　告

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送检样品：矽世代－奈米矽土材料

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Verification of anti viral activity of Sistyle Nano Silicate Clay sample against flue-virus, H1N1

Target Sport Co., LTD. and **Beijing Institute of Microbiology and Epidemiology** agreed to perform an evaluation of the anti-viral efficacy of **Sistyle Nano Silicate Clay** sample against flu-virus. The methods of cell culture together with ELISA (enzyme linked immunity system assay) neutralization test carried out at Beijing Institute of Microbiology and Epidemiology. **Sistyle Nano Silicate Clay** sample showed significant efficacy in killing the flu-virus.

Materials

Tested sample : Sistyle Nano Silicate Clay (supplied by **Target Sport Co., LTD.)**

Virus strain

Name : A1/Guangdong/luoyu/H1N1

Resource: China-CDC

Major methods

The 0.9ml **Sistyle Nano Silicate Clay** sample was taken and added to a test tube. The 0.1ml virus medium were added (contain 1640 medium pH 7.0) to the tube. The samples were exposed to the virus medium for different time periods including; 0-1minuts, 60 minutes, 4 hours, 8 hours, 16 hours, and 24 hours. The treatment samples were inoculated to the MDCK cell line. The plates were incubated for 24 or

48 hours at 37℃ (containing 5% of CO_2).

Detection of the survived virus

The surviving viruses were detected through the ELISA (reference to the method supplied by WHO.). $TCID_{50}$ survived virus were determined by statistic method.

Results

Two samples (including one control sample) have been tested in our test. The samples shown significant efficacy on disinfect to the A/H1N1 flu-virus. The titer of the survived virus was $1.0*10^3$ after 1 hours contact with the **Sistyle Nano Silicate Clay** sample. The titer of the survived virus on the control sample was $1.0*10^4$ after contact 1 hour. And the viruses have been killed completely for the **Sistyle Nano Silicate Clay** treated samples after contact 8 hours. See figure 1

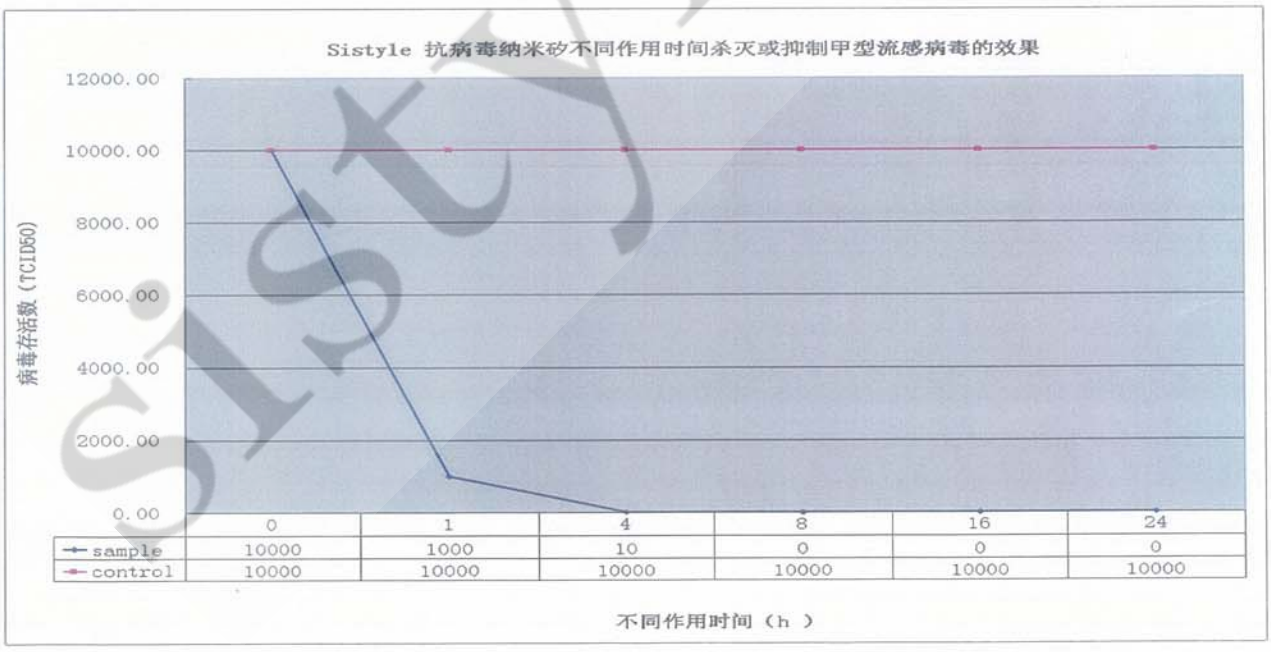

Figure 1 The result of **Sistyle Nano Silicate Clay** sample against the flue-virus

Conclusions

The titer of the survived virus was $1.0*10^3$ after 1 hours contact with the **Sistyle Nano Silicate Clay** sample. The titer of the survived virus on the control sample was $1.0*10^4$ after contact 1 hour. And the viruses have been killed completely for the **Sistyle Nano Silicate Clay** treated samples after contact 8 hours, 16 hours and 24 hours.

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