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Studies of Melody Efficacy Vaccine Against SARS-CoV-2 are Closing COVID-19 Pandemic Doors? Single Dose is Recommended as Therapeutic Drug and Two Doses Application as Preventive Vaccine

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*In vitro studies provide data that is important for proof-of-concept determination, function validation, and peer review manuscript preparation, FDA applications and clinical trials. Our in vitro studies of Melody efficacy as a vaccine against SARS-CoV-2 were made in five cell cultures (BEAS-2B, HUVEC, HMEC-1, HEK293 and WM-266), where the dead cell number monitored by using flow cytometry. Melody's efficacy was tested by incubating melody RpA (RNA-peptide A) and melody RpAB (RNA-peptide AB). Both incubations were pending 16 hours with melody Lethal Concentration 50 % (LC50 µg/µL), which was determinated in a toxicological assay in the five cell cultures as previously described. Our conclusion was focused to understand the statistical difference in LC50 in order to estimate the melody preventive efficacity as vaccine in "In vitro" test. In the present study, the preventive efficacy values obtained in the five cell lines differ statistically between the value of two doses when compared with a single or three doses, p=5.321. These results suggested that the application of two doses is more effective. We used the Student's t-test with n=6 to calculate p-value according to mRNA avian coronavirus action after one, two and three doses incubations of mRNA-peptide-A (melody therapeutic) of 16 hours. Our conclusion was focused to understand the statistical difference in LC50 in order to estimate the melody therapeutic efficacity as vaccine in "In vitro" test in cell lines (BEAS-2B, HUVEC, HMEC-1, HEK293 and WM-266). Results: Melody Therapeutic Efficacity was found to be 93.82% with using a single dose. Meanwhile, Melody Preventive Efficacity was found as 92.53% with using two doses. The therapeutic efficacy values obtained in the five cell lines in this study did not vary statistically significantly between the three doses used, p**=0.004.*

As a result, the Melody application of a single dose is recommended as therapeutic drug and two doses application as preventive vaccine.

Keywords: *In vitro* studies, FDA Applications, ClinicalTtrials, Single Dose,Ttwo Doses, Preventive, Therapeutic, Efficacity.

PATENT

VACCINE RNA-PEPTIDE AGAINST SARS-2 CoV-2 WITH ENDOGENOUS EXOSOMES AS CARRIER: "The present invention relates to antiviral vaccines, and more particularly, to a vaccine RNA-peptide against coronavirus, specifically SARS-CoV-2 using endogenous exosomes as carrier" Inventor: **Luis CRUZ RODRIGUEZ** (2021). Assignment: Elidan America, LLC.

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