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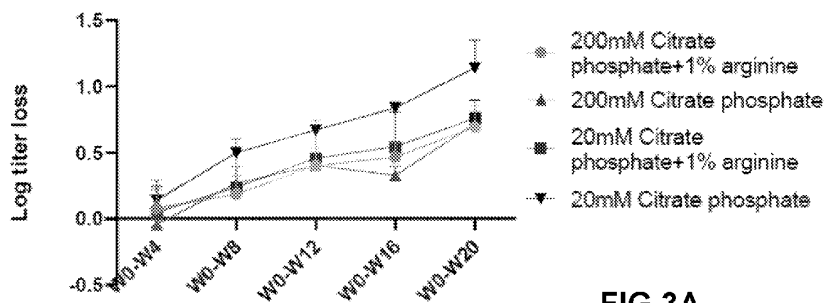


FIG.3A

(57) Abstract: The disclosure is directed to a novel liquid vaccine formulation and composition. In one embodiment the novel liquid vaccine formulation comprises an immunogen such as PIV5, a stabilizing agent, and a buffer, with the resulting liquid vaccine formulation maintaining storage-stable immunogenicity with a potency loss of less than 0.5 Log₁₀ at 4°C for at least 4 months. In yet another embodiment the PIV5 immunogen expresses the SARS-CoV-2 S or N protein.