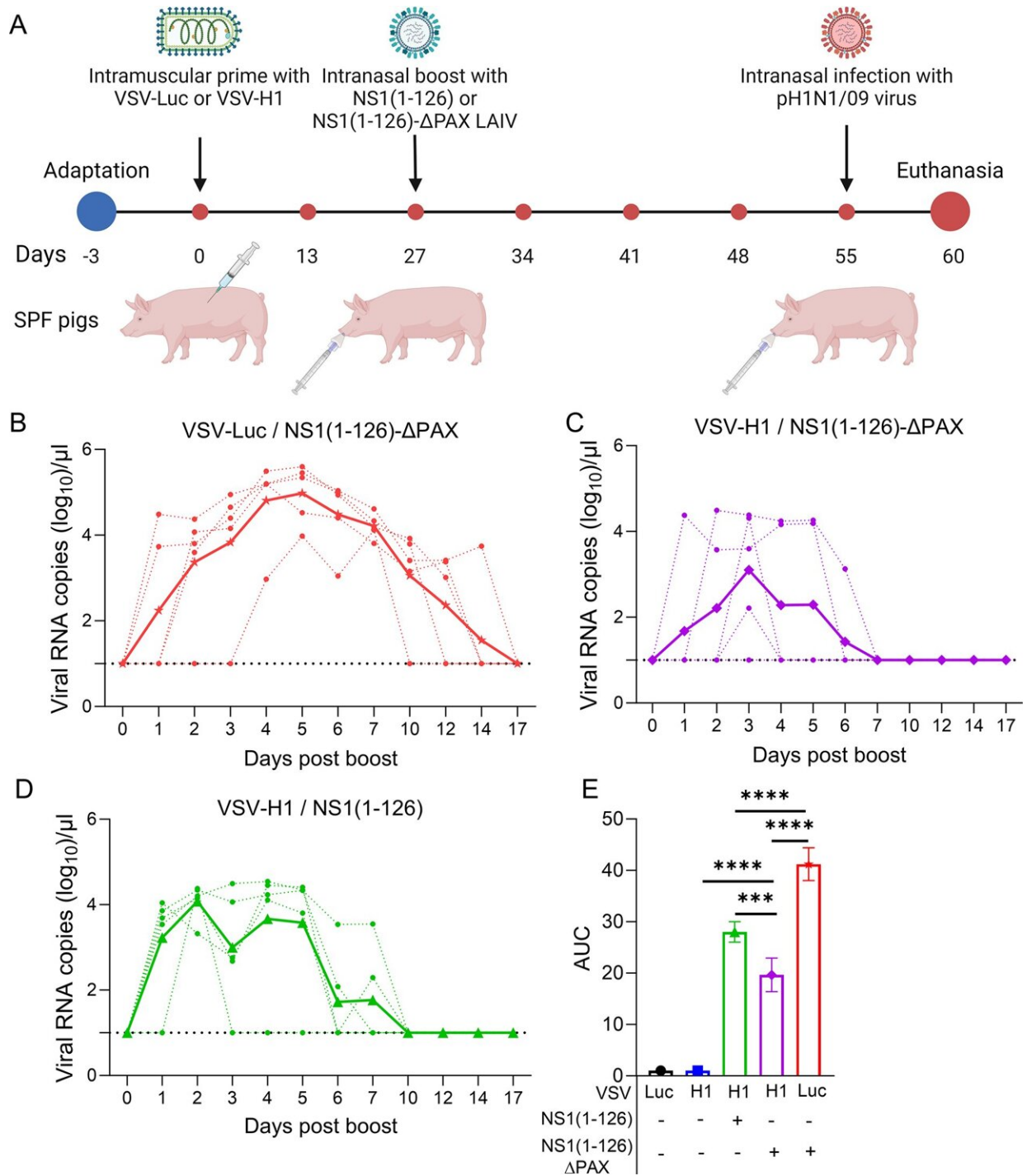# Intramuscular prime/intranasal boost vaccine strategy shows promise in porcine flu model

August 8 2024

Intramuscular prime/intranasal boost vaccination protocol reduces LAIV shedding. (A) Schematic representation of the experimental design. Red points on the timeline indicate the time points of blood sampling. (B-D) Detection of viral RNA copies in nasal swab samples collected after intranasal inoculation of the animals with the indicated LAIV. At day 55 all animals were challenged via

the nasal route using 10^6 ffu of pH1N1/09. Individual animals are represented by dashed lines and group mean values by continuous thick lines. (B) Pigs were first immunized (i.m.) with the VSV-Luc control vaccine followed by intranasal immunization with NS1(1–126)-ΔPAX LAIV. (C) Pigs were immunized (i.m.) with VSV-H1 and subsequently boosted (i.n.) with NS1(1–126)-ΔPAX LAIV. (D) Animals were primed (i.m.) with VSV-H1 and boosted (i.n.) with NS1(1–126) LAIV. (E) AUC analyses of viral RNA load in nasal swab samples collected between days 0 and 17 after intranasal vaccination with LAIV (calculated with data from B-D). Significant differences of the AUC values were determined with the one-way ANOVA test (*p