



**Supplementary Figure 1:** Complete Adverse Events description for the 4 cohorts. **(A)** Heatmap showing the presence (red) and absence (light grey) of all vaccine-related adverse events. The most frequent AEs are shown at the bottom of the heatmap, and the columns are ordered per dose and cohort, as shown in the bottom annotation (USA, purple; Switzerland, yellow; Gabon, green and Kenya, pink). The number of AEs per participant is shown in the bar plot at the top and the total number of reported adverse events is shown in the bar plot on the right. **(B)** Dot plot showing the mean and the standard deviation of the onset day. The colours represent the AE grade: grade 1 (grey), grade 2 (pink) and grade 3 (red). **(C)** The bar plot shows the total number of adverse events per dose and per AE grade (1 - grey; 2 - pink and 3 - red). All participants who received the vaccine with available dcRT-MLPA data at day 0 ( $n = 343$ ) were included; they had received different doses of rVSVΔG-ZEBOV-GP, distributed as follows:  $1 \times 10^8$  pfu (US  $n = 35$ ),  $5 \times 10^7$  pfu (Switzerland  $n = 16$ ),  $2 \times 10^7$  pfu (US  $n = 35$ , Gabon  $n = 20$ , Kenya  $n = 20$ ),  $1 \times 10^7$  pfu (Switzerland  $n = 35$ ),  $9 \times 10^6$  pfu (USA  $n = 35$ ),  $3 \times 10^6$  pfu (USA  $n = 20$ , Gabon  $n = 35$ , Kenya  $n = 20$ ),  $3 \times 10^5$  pfu (Switzerland  $n = 51$ , Gabon  $n = 21$ ),  $3 \times 10^4$  pfu (Gabon  $n = 19$ ),  $3 \times 10^3$  pfu (Gabon  $n = 21$ ) and placebo (Switzerland  $n=13$ , USA  $n=19$ ).

