

**Supplemental Table 2. Neutralizing antibody titers.** Serum was evaluated for neutralizing antibody titers prior to challenge and terminally for untreated controls. Treated macaque sera were additionally evaluated 10 and 14 days post-challenge. The reciprocal dilution titer of sera that neutralized  $\geq 50\%$  of viral plaques is reported.

Animal*	MARV Dose	Treatment**	Day 0†	Day 6†	Day 10†	Terminal or Day 28†
Control 1	High	None	$\leq 10$	N.D.	N.D.	$\leq 10$
Control 2	High	None	$\leq 10$	N.D.	N.D.	$\leq 10$
Control 3	High	None	$\leq 10$	N.D.	N.D.	$\leq 10$
Treated Fatal 1	High	rVSV $\Delta$ G/MARV-Angola-GP	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
Treated Fatal 2	High	rVSV $\Delta$ G/MARV-Angola-GP	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
Treated Fatal 3	High	rVSV $\Delta$ G/MARV-Angola-GP	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
Treated Survivor	High	rVSV $\Delta$ G/MARV-Angola-GP	$\leq 10$	$\leq 10$	<b>20</b>	<b>20</b>
Control 1	Low	None	$\leq 10$	N.D.	N.D.	$\leq 10$
Control 2	Low	None	$\leq 10$	N.D.	N.D.	$\leq 10$
Control 3	Low	None	$\leq 10$	N.D.	$\leq 10$	$\leq 10$
Vector Control	Low	rVSVN4CT1-HIV gag	$\leq 10$	N.D.	N.D.	$\leq 10$
$\Delta$ G Treated Fatal	Low	rVSV $\Delta$ G/MARV-Angola-GP	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
$\Delta$ G Survivor 1	Low	rVSV $\Delta$ G/MARV-Angola-GP	$\leq 10$	$\leq 10$	$\leq 10$	<b>40</b>
$\Delta$ G Survivor 2	Low	rVSV $\Delta$ G/MARV-Angola-GP	$\leq 10$	$\leq 10$	$\leq 10$	<b>40</b>
$\Delta$ G Survivor 3	Low	rVSV $\Delta$ G/MARV-Angola-GP	$\leq 10$	$\leq 10$	<b>20</b>	<b>20</b>
N4 Fatal 1	Low	rVSVN4CT1-MARV-Angola GP	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
N4 Fatal 2	Low	rVSVN4CT1-MARV-Angola GP	$\leq 10$	$\leq 10$	$\leq 10$	$\leq 10$
N4 Survivor 1	Low	rVSVN4CT1-MARV-Angola GP	$\leq 10$	$\leq 10$	$\leq 10$	<b>40</b>

N4 Survivor 2	Low	rVSVN4CT1-MARV-Angola GP	≤ 10	≤ 10	<b>20</b>	<b>80</b>
N4 Survivor 3	Low	rVSVN4CT1-MARV-Angola GP	≤ 10	≤ 10	<b>20</b>	<b>40</b>

\*N4, referring to individual monkey treated with rVSVN4CT1-MARV-Angola GP; ΔG, referring to individual monkey treated with rVSVΔG/MARV-Angola-GP.

\*\*MARV, Marburg virus; rVSV, recombinant vesicular stomatitis virus; MARV-Angola-GP, Marburg virus Angola glycoprotein; N4, the rVSV nucleoprotein (N) is at position 4 in the genome; CT1, the native rVSV glycoprotein (G) has a truncated cytoplasmic tail; ΔG, the native VSV G is absent; HIV, human immunodeficiency virus; gag, group-specific antigen.

†N.D, not determined.