

Supplemental Table 1. Clinical findings. Animals were monitored daily for signs of disease. Blood was collected prior to challenge, terminally, and 3, 6, 10, 14, and 21 days post-challenge to perform hematology cell counts on whole blood and biochemistry analysis on serum.

Animal*	MARV Dose	Treatment**	Clinical Signs †	Final Disposition
Control 1	High	None	Fever (6), depression (6-8), mild to moderate petechial rash (6-8), leukocytosis (8), BUN +++ (8), CRE +++ (8), ALT +++ (6,8), AST +++ (6) > (8), ALP + (6), GGT ++ (8), CRP increase (6,8)	Succumbed on day 8
Control 2 (historical)	High	None	Fever (3,6,7), depression (6-7), anorexia (6-7), mild to moderate petechial rash (7), mild dyspnea (7), leukocytosis (7), granulocytosis (7), BUN ++ (7), CRE + (7), ALT +++ (6) > (7), AST +++ (6) > (7), ALP ++ (6) +++ (7), GGT ++ (6) +++ (7), CRP increase (6,7)	Succumbed on day 7
Control 3 (historical)	High	None	Fever (4,6), depression (6-8), anorexia (7-8), mild to moderate petechial rash (7-8), leukocytosis (8), lymphopenia (3,6), CRE ++ (8), ALT +++ (6) > (8), AST +++ (6) > (8), ALP ++ (6) +++ (8), GGT ++ (8), CRP increase (6,8)	Succumbed on day 8
Treated Fatal 1	High	rVSVΔG/MARV -Angola-GP	Fever (6,10), depression (9-11), anorexia (10-11), mild to moderate petechial rash (10), moderate to severe petechial rash (11), edema (11), leukocytosis (10,11), lymphopenia (6), granulocytosis (10,11), thrombocytopenia (10,11), BUN + (10) +++ (11), CRE + (10) +++ (11), ALT +++ (10,11), AST > (10,11), GGT + (10,11), CRP increase (6,10,11)	Succumbed on day 11
Treated Fatal 2	High	rVSVΔG/MARV -Angola-GP	Fever (6), depression (8-9), moderate petechial rash (8-9), lymphopenia (6), AST + (6), CRP increase (6)	Succumbed on day 10
Treated Fatal 3	High	rVSVΔG/MARV -Angola-GP	Fever (6), depression (7-8), mild to moderate petechial rash (8), leukocytosis (6), granulocytosis (6), CRP increase (3,6)	Succumbed on day 9
Treated Survivor	High	rVSVΔG/MARV -Angola-GP	Fever (6), mild depression (11), anorexia (13), leukocytosis (6,14,21,28), granulocytosis (3,6,14,21), thrombocytopenia (10,14), ALT +++ (10) ++ (14), AST+++ (10), ALP + (3,6, 28) ++ (10,21) +++ (14), GGT + (10,11), CRP increase (3,6,10,14)	Survived to day 28
Control 1	Low	None	Fever (6), depression (6-8), anorexia (7-8), lymphopenia (3,6), ALT +++ (6), AST +++ (6) > (8), ALP + (6), GGT + (6), CRP increase (3,6)	Succumbed on day 8
Control 2	Low	None	Fever (6), depression (8-9), anorexia (7-9), mild to moderate petechial rash (8-9), BUN ++ (9), CRE +	Succumbed on day 9

			(9), ALT ++ (6) +++ (9), AST +++ (6,9), ALP ++ (9), GGT +++ (9), CRP increase (9)	
Control 3	Low	None	Fever (6), depression (10), anorexia (8,10), mild to moderate petechial rash (10), emesis (8), leukocytosis (6,10), granulocytosis (3,6), CRE + (10), ALT +++ (10), AST + (6) +++ (10), ALP +++ (10), GGT +++ (10), CRP increase (6,10)	Succumbed on day 10
Vector Control	Low	rVSVN4CT1-HIV gag	Fever (10), depression (12), anorexia (10-12), mild petechial rash (10-12), BUN + (12), CRE ++ (12), ALT +++ (10,12), AST +++ (10,12), ALP ++ (10,12), GGT +++ (10,12), CRP increase (10,12)	Succumbed on day 12
Δ G Treated Fatal	Low	rVSV Δ G/MARV-Angola-GP	Fever (6), depression (10,11), anorexia (8,9,11), mild to moderate petechial rash (10), ecchymotic rash (11), leukocytosis (11), lymphopenia (6,10), granulocytosis (3,6,10,11), thrombocytopenia (10), BUN + (10) +++ (11), CRE +++ (11), ALT > (10,11), AST > (10,11), ALP ++ (10,11), GGT +++ (10,11), CRP increase (6,10,11)	Succumbed on day 11
Δ G Survivor 1	Low	rVSV Δ G/MARV-Angola-GP	Granulocytosis (21)	Survived to day 28
Δ G Survivor 2	Low	rVSV Δ G/MARV-Angola-GP		Survived to day 28
Δ G Survivor 3	Low	rVSV Δ G/MARV-Angola-GP		Survived to day 28
N4 Fatal 1	Low	rVSVN4CT1-MARV-Angola GP	Fever (6), depression (10), anorexia (9-10), mild to moderate petechial rash (10), mild dyspnea (10), leukocytosis (10), lymphopenia (6), granulocytosis (10), BUN +++ (10), CRE +++ (10), ALT +++ (10), AST ++ (10), ALP ++ (10), GGT +++ (10), CRP increase (10)	Succumbed on day 10
N4 Fatal 2	Low	rVSVN4CT1-MARV-Angola GP	Fever (6), depression (10), anorexia (9-10), mild to moderate petechial rash (10), mild dyspnea (10), leukocytosis (10), granulocytosis (6), BUN +++ (10), CRE +++ (10), ALT +++ (10), AST ++ (10), ALP ++ (10), GGT ++ (10), CRP increase (6,10)	Succumbed on day 10
N4 Survivor 1	Low	rVSVN4CT1-MARV-Angola GP		Survived to day 28
N4 Survivor 2	Low	rVSVN4CT1-MARV-Angola GP		Survived to day 28
N4 Survivor 3	Low	rVSVN4CT1-MARV-Angola GP	Fever (6), leukocytosis (14), granulocytosis (6), ALT ++ (10), AST +++ (10)	Survived to day 28

*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.

†Day after MARV Angola challenge is in parentheses. Fever is defined as a temperature greater than 2.5 °F above baseline or at least 1.5 °F above baseline and ≥ 103.5 °F, or 1.1 °F above baseline and ≥ 104 °F. Lymphopenia and thrombocytopenia are defined by a $\geq 35\%$ drop in numbers of lymphocytes and platelets, respectively. Leukocytosis and granulocytosis are defined as a \geq two-fold increase in leukocytes and granulocytes, respectively. Abbreviations: BUN, blood urea nitrogen; CRE, creatinine; ALT, alanine aminotransferase; AST, aspartate aminotransferase; ALP, alkaline phosphatase; GGT, gamma-glutamyltransferase; CRP, c-reactive protein. Crosses indicate increases in liver enzymes (ALT, AST, ALP, GGT), renal function test values (BUN, CRE), and c-reactive protein: 2- to 3-fold increase, +; >3- up to 5-fold increase, ++; >5 fold increase, +++; out of range, >.