

Appendix tables and figures for “Safety and pharmacokinetics of broadly neutralizing human monoclonal antibody VRC07-523LS in healthy adults: A phase 1 dose-escalation clinical trial” by Gaudinski et al.

Table S1. Elevated serum cytokine levels in a subject during infusion reactions following 20 mg/kg IV administrations of VRC07-523LS

Cytokine [normal range] ^a	After 1st Infusion	After 2nd Infusion		After 3rd Infusion	
	60 min	60 min	90 min	60 min	240 min
TNF- α [≤ 22 pg/mL]	429	257	563	30	8
IL-6 [≤ 5 pg/mL]	32	19	256	16	61
IL-13 [≤ 5 pg/mL]	<5	<5	11	<5	<5

^aLevels of histamine, tryptase, IFN- γ , IL-1 β , sIL-2R, IL-2, IL-4, IL-5, IL-10, IL-8, IL-12, and IL-17 were within normal ranges at all time points tested

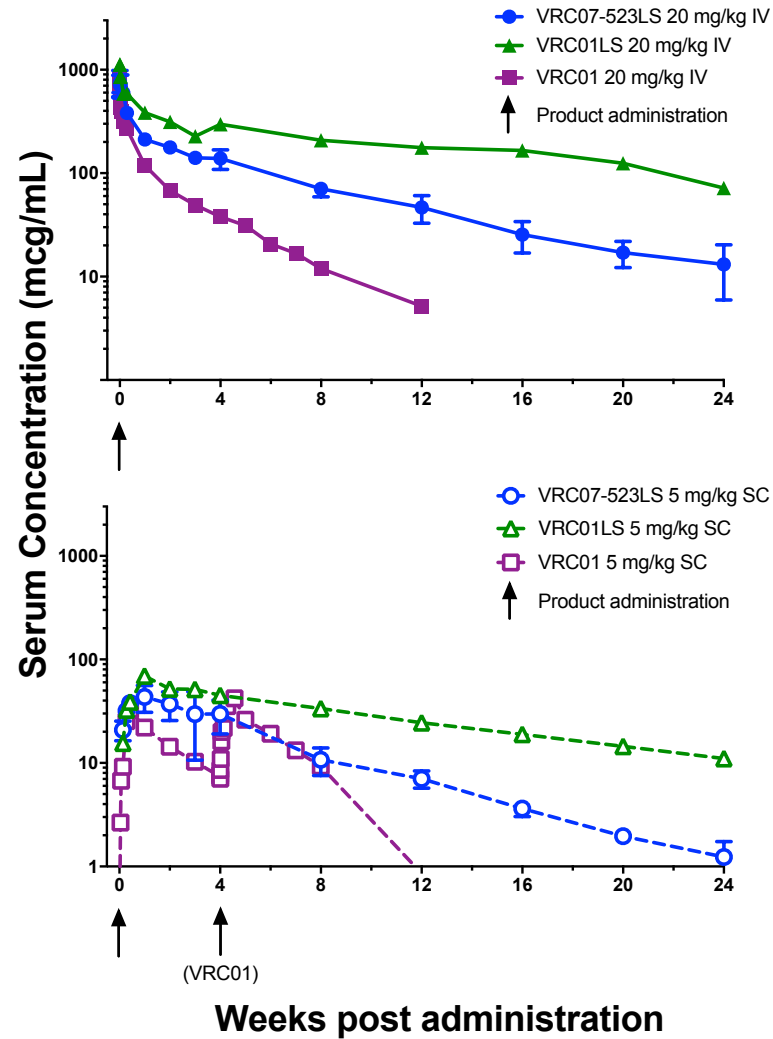


Figure S1. Comparison of subject serum concentrations (mcg/mL) following a single administration of VRC07-523LS, VRC01LS, or VRC01. Group geometric mean serum concentrations (mcg/mL) with error bars indicating the standard deviation for up to 24 weeks after receipt of either a single 20 mg/kg IV or 5 mg/kg SC dose of either VRC01, VRC01LS, or VRC07-523LS. Subjects who received VRC01 at 5 mg/kg SC received 2 doses of antibody: at weeks 0 and 4. Upward pointing arrows indicate antibody infusions. Each group includes 3-5 subjects. Data for VRC01 and VRC01LS are shown for comparison and were previously published.^{16, 19}

ADA assessment after VRC07-523LS administration

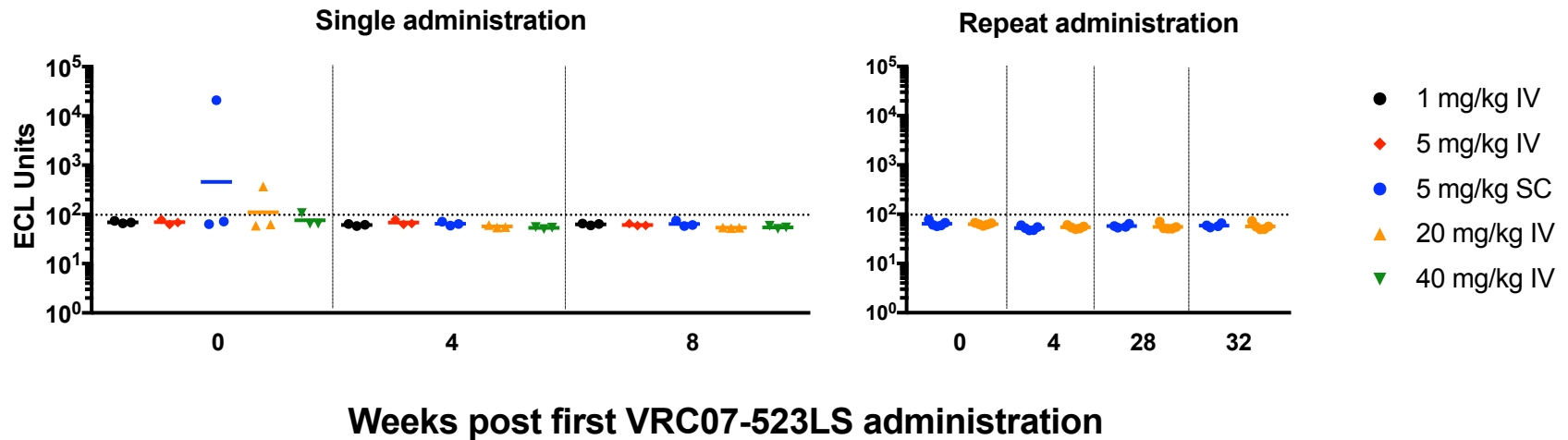


Figure S2. Anti-drug antibody assessment in subjects after administration of VRC07-523LS. An electrochemiluminescence (ECL) assay was used to detect the generation of antibodies against VRC07-523LS. Data are shown for subjects receiving a single (left panel) or repeat doses (right panel) of VRC07-523LS. The dotted line indicates the ECL threshold determined by a panel of serum samples from healthy adults who have never received VRC07-523LS.

Table S2. In vitro IC₅₀ values for VRC01, VRC01LS, and VRC07-523LS against a small panel of Env-pseudoviruses used to assess serum neutralization after passive transfer of these same antibodies

Virus strain	Clade	VRC07-523LS	VRC01LS	VRC01	VRC07-523LS vs VRC01 fold higher potency
BG505_W6M_C2	A	0.04	0.07	0.06	1.6
Q23.17	A	0.06	0.09	0.09	1.5
BJOX028000_10_3	AE	0.01	0.16	0.15	11.4
CNE59	AE	0.12	0.81	0.75	6.1
PVO.04	B	0.17	0.55	0.59	3.4
THRO.18	B	1.57	5.89	5.97	3.8
21197826	C	1.05	>50	>50	>47
21369737	C	0.07	>50	>50	>714
21561324	C	0.03	0.35	0.43	17
6322.V4.C1	C	0.05	>50	>50	>1000
6631_V3	C	0.3	>50	>50	>166
CAP210	C	2.6	>50	>50	>19
CAP382_2	C	1.12	>50	>50	>44
CT565_C7	C	16.96	>50	>50	>2
DU156.12	C	0.02	0.1	0.11	4.6
MW965.26	C	0.02	0.05	0.06	3.3
ZM249M_PL1	C	0.04	0.12	0.11	2.6
ZM53M_PB12	C	0.26	1.22	1.01	3.9
3016_V5	D	0.06	0.1	0.09	1.6
57128_VR	D	1.21	>50	>50	>41
SIV_MAC251.30	N/A	>50	>50	>50	N/A
MuLV	N/A	>50	>50	>50	N/A

All antibodies diluted in normal human serum for determination of IC₅₀ values

Values are shown in mcg/mL

Viruses that were not neutralized by the antibody tested at the input concentration of 50 mcg/mL are displayed as >50

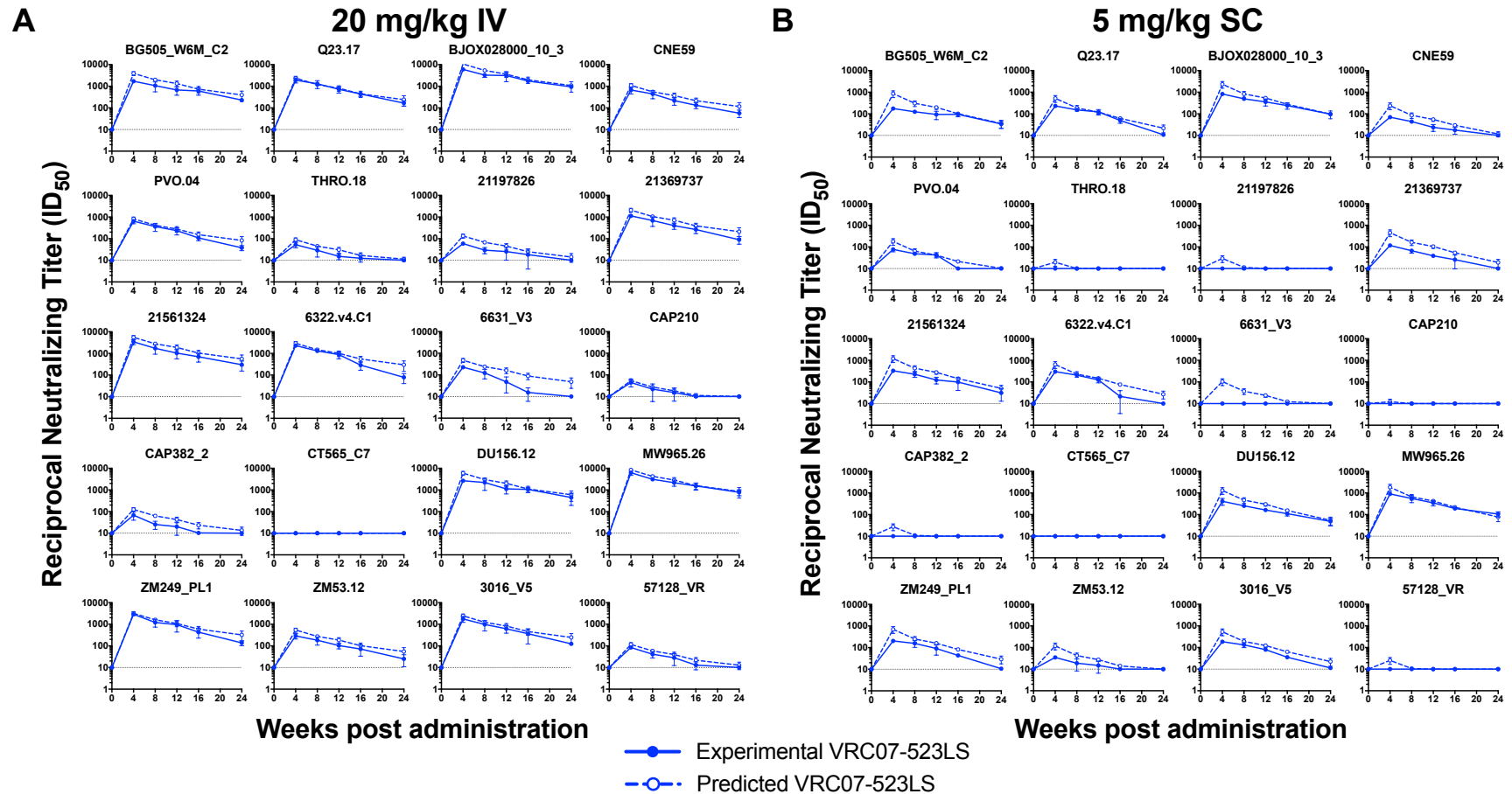


Figure S3. Neutralizing ability of VRC07-523LS is maintained following administration. Reciprocal neutralization titers (ID_{50}) over time in a subset of subjects who received a single administration of (A) 20 mg/kg IV or (B) 5 mg/kg SC of VRC07-523LS. Solid lines and closed circles represent the reciprocal serum dilution that produces 50% inhibition (ID_{50}) of each viral strain. Dashed lines and open circles represent the predicted ID_{50} based on the measured VRC07-523LS serum concentration and known inhibitory concentration (IC_{50}) of VRC07-523LS for each virus tested. Values are the means of duplicate wells in the same plate. $n=3$ for each dose group. Dotted line at 10 indicates limit of detection for the assay.

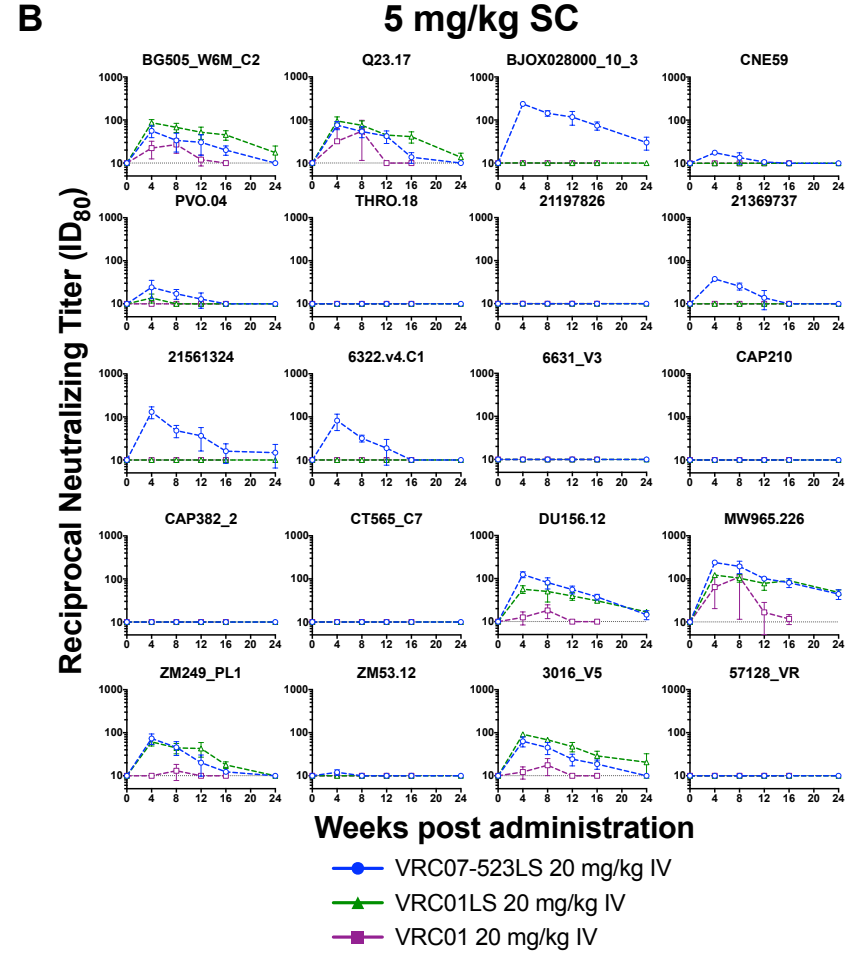
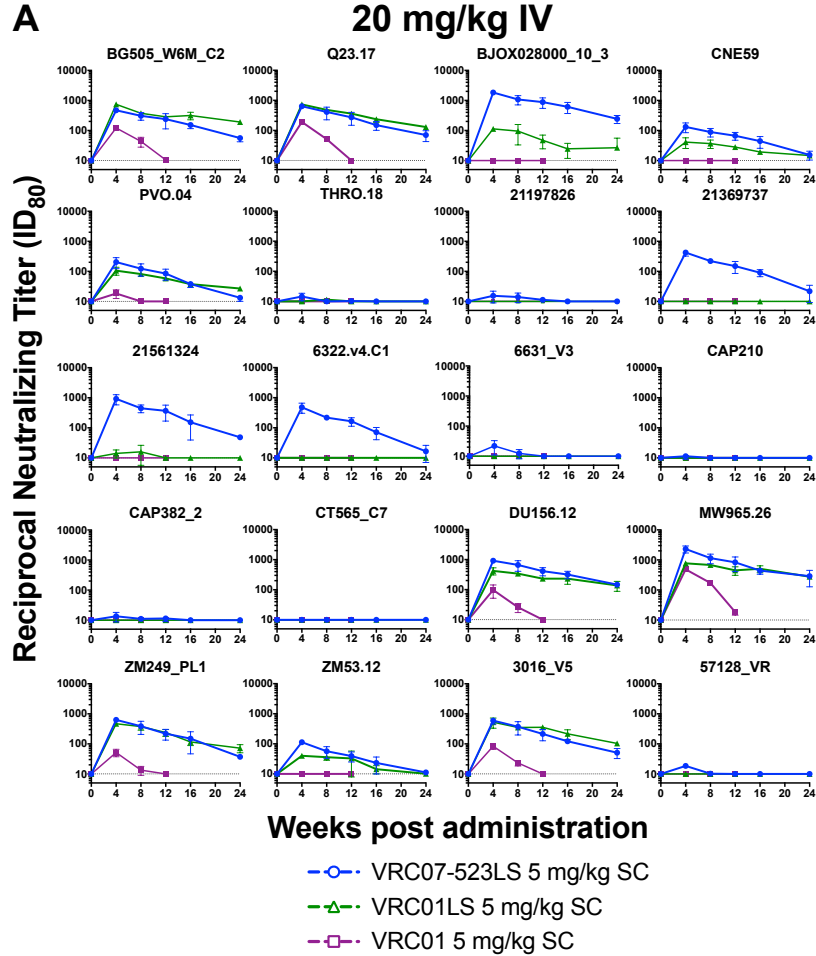


Figure S4. Neutralization potency by ID_{80} for up to 24 weeks after a single bnMAb administration using a single round of replication Env-pseudovirus assay. Reciprocal neutralization titers (ID_{80}) over time in subjects who received a single administration of (A) 20 mg/kg IV or (B) 5 mg/kg SC of VRC07-523LS, VRC01LS, or VRC01. Subjects who received VRC01 at 5mg/kg SC received 2 doses of antibody: at weeks 0 and 4. $n=3$ for each dose group. Dotted line at 10 indicates limit of detection for the assay.

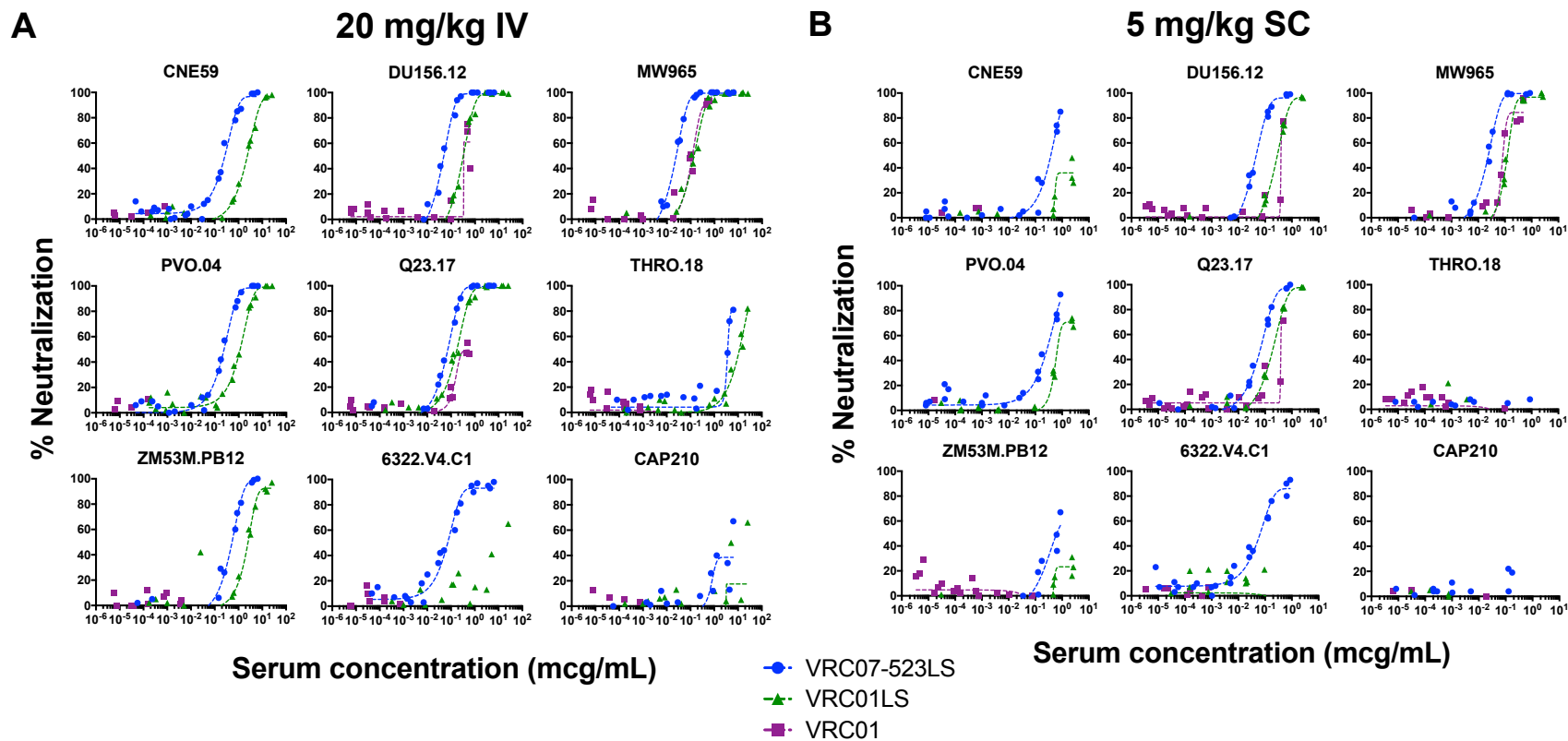


Figure S5. A selection of neutralization curves at 12 weeks post administration. Percent neutralization for a subset of viruses tested for serum samples following administration of (A) 20 mg/kg IV or (B) 5 mg/kg SC of VRC07-523LS, VRC01LS, or VRC01. All subjects received a single dose of antibody at week 0, with the exception of VRC01 subjects who received a second dose at 4 weeks. Serial dilutions of subject sera were used to generate neutralization curves against each specified pseudovirus. n=3 for each dose group.

Table S3. Comparison of ID₅₀ values at 4 weeks post administration for VRC07-523LS, VRC01LS, and VRC01

Virus	Dose Group	Virus clade	VRC07-523LS	VRC01LS	VRC01	Fold difference (VRC07-523LS/VRC01LS) ^a
Serum Concentration mcg/mL (SD)						
	5 mg/kg SC		27 (12), n=8	195 (63), n=8	7.0 (1.7), n=3	0.53
	20 mg/kg IV		51 (16), n=18	286 (85), n=13	38 (1.1), n=3	0.68
Neutralization Titer ID₅₀ GMT (SD), n=3						
BG505 W6M C2	5 mg/kg SC	A	176 (16)	268 (29)	91 (60)	0.65
	20 mg/kg IV		1685 (284)	2203 (882)	426 (80)	0.77
Q23.17	5 mg/kg SC	A	231 (20)	264 (48)	171 (642)	0.88
	20 mg/kg IV		1864 (496)	2268 (310)	551 (19)	0.82
BJOX028000_10_3	5 mg/kg SC	AE	823 (83)	121 (42)	5 (0)	6.81
	20 mg/kg IV		5992 (396)	802 (238)	171 (129)	7.48
CNE59	5 mg/kg SC	AE	70 (12)	18 (7.3)	5 (0)	3.80
	20 mg/kg IV		642 (234)	151 (4.2)	16 (15)	4.26
PVO.04	5 mg/kg SC	B	76 (17)	35 (11)	14 (56)	2.19
	20 mg/kg IV		632 (155)	325 (43)	54 (23)	1.95
THRO.18	5 mg/kg SC	B	5 (0)	5 (0)	24 (329)	1.00
	20 mg/kg IV		51 (15)	21 (9.5)	5 (0)	2.39
21197826	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		59 (3.5)	5 (0)	5 (0)	11.85
21369737	5 mg/kg SC	C	117 (16)	5 (0)	5 (0)	23.32
	20 mg/kg IV		1114 (182)	5 (0)	5 (0)	222.86
21561324	5 mg/kg SC	C	326 (60)	12 (1.6)	5 (0)	27.28
	20 mg/kg IV		3362 (898)	367 (246)	13 (53)	9.15
6322.V4.C1	5 mg/kg SC	C	300 (35)	5 (0)	5 (0)	60.07
	20 mg/kg IV		2288 (210)	5 (0)	5 (0)	457.6
6631_V3	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		225 (26)	5 (0)	5 (0)	44.94
CAP210	5 mg/kg SC	C	5 (0)	5 (0)	26 (420)	1.00
	20 mg/kg IV		42 (17)	5 (0)	5 (0)	8.44
CAP382_2	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		64 (29)	5 (0)	5 (0)	12.85
CT565_C7	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		5 (0)	5 (0)	5 (0)	1.00
DU156.12	5 mg/kg SC	C	396 (144)	152 (9.9)	30 (19)	2.60
	20 mg/kg IV		2654 (370)	1356 (255)	230 (60)	1.96
MW965.26	5 mg/kg SC	C	900 (19)	392 (43)	383 (837)	2.30

	20 mg/kg IV		6107 (1521)	2228 (368)	1189 (219)	2.74
ZM249M PL1	5 mg/kg SC	C	202 (35)	174 (42)	21 (12)	1.16
	20 mg/kg IV		2890 (255)	1881 (678)	191 (63)	1.54
ZM53M PB12	5 mg/kg SC	C	35 (1.2)	13 (9.6)	5 (0)	2.71
	20 mg/kg IV		282 (80)	128 (13)	8.6 (3.7)	2.21
3016 V5	5 mg/kg SC	D	184 (34)	241 (64)	25 (9.7)	0.76
	20 mg/kg IV		1699 (529)	1888 (585)	177 (35)	0.90
57128 VR	5 mg/kg SC	D	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		84 (11)	5 (0)	5 (0)	16.79

IV= intravenous, SC= subcutaneous

^aFold difference (VRC07-523LS/VRC01LS) was calculated as the ID₅₀ GMT of VRC07-523LS divided by the ID₅₀ GMT of VRC01LS.

ID₅₀ values <10 are calculated as 5.

Table S4. Comparison of ID₈₀ values at 4 weeks post administration for VRC07-523LS, VRC01LS, and VRC01

Virus	Dose Group	Virus clade	VRC07-523LS	VRC01LS	VRC01	Fold difference (VRC07-523LS/VRC01LS) ^a
Serum Concentration mcg/mL (SD)						
	5 mg/kg SC		27 (12), n=8	195 (63), n=8	7.0 (1.7), n=3	0.53
	20 mg/kg IV		51 (16), n=18	286 (85), n=13	38 (1.1), n=3	0.68
Neutralization Titer ID₈₀ GMT (SD), n=3						
BG505_W6M_C2	5 mg/kg SC	A	54 (17)	86 (15)	21 (9.8)	0.63
	20 mg/kg IV		470 (17)	742 (20)	120 (21)	0.63
Q23.17	5 mg/kg SC	A	75(16)	93 (23)	23 (31)	0.80
	20 mg/kg IV		632 (88)	728 (89)	191 (10)	0.87
BJOX028000_10_3	5 mg/kg SC	AE	235 (23)	6.4 (3.1)	5 (0)	36.88
	20 mg/kg IV		1832 (239)	113 (14)	5 (0)	16.25
CNE59	5 mg/kg SC	AE	18 (0.7)	5 (0)	5 (0)	3.52
	20 mg/kg IV		126 (47)	39 (16)	5 (0)	3.22
PVO.04	5 mg/kg SC	B	23 (11)	11 (6.1)	5 (0)	2.13
	20 mg/kg IV		194 (81)	103 (31)	18 (5.9)	1.89
THRO.18	5 mg/kg SC	B	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		11 (6.9)	5 (0)	5 (0)	2.24
21197826	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		12 (8.1)	5 (0)	5 (0)	2.31
21369737	5 mg/kg SC	C	38 (3.8)	5 (0)	5 (0)	7.51
	20 mg/kg IV		414 (101)	5 (0)	5 (0)	82.74
21561324	5 mg/kg SC	C	127 (40)	5 (0)	5 (0)	25.36
	20 mg/kg IV		882 (342)	11 (6.9)	5 (0)	81.21
6322.V4.C1	5 mg/kg SC	C	78 (34)	5 (0)	5 (0)	15.55
	20 mg/kg IV		459 (176)	5 (0)	5 (0)	91.8
6631_V3	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		20 (11)	5 (0)	5 (0)	4.07
CAP210	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		7.0 (5.2)	5 (0)	5 (0)	1.41
CAP382_2	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		13 (4.7)	5 (0)	5 (0)	2.60
CT565_C7	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		5 (0)	5 (0)	5 (0)	1.00
DU156.12	5 mg/kg SC	C	123 (19)	56 (11)	9.7 (6.3)	2.21
	20 mg/kg IV		912 (117)	410 (112)	91 (46)	2.22
MW965.26	5 mg/kg SC	C	239 (23)	122 (11)	56 (44)	1.96

	20 mg/kg IV		2252 (612)	770 (74)	483 (84)	2.92
ZM249M_PL1	5 mg/kg SC	C	71 (20)	61 (12)	5 (0)	1.18
	20 mg/kg IV		626 (92)	467 (30)	51 (14)	1.34
ZM53M_PB12	5 mg/kg SC	C	9.5 (4.6)	5 (0)	5 (0)	1.89
	20 mg/kg IV		112 (18)	40 (1.8)	5 (0)	2.81
3016_V5	5 mg/kg SC	D	62 (16)	92 (8.6)	7.5 (6.7)	0.67
	20 mg/kg IV		584 (137)	505 (195)	82 (18)	1.16
57128_VR	5 mg/kg SC	D	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		18 (2.6)	5 (0)	5 (0)	3.66

IV= intravenous, SC= subcutaneous

^aFold difference (VRC07-523LS/VRC01LS) was calculated as the ID₈₀ GMT of VRC07-523LS divided by the ID₈₀ GMT of VRC01LS.

ID₈₀ values <10 are calculated as 5.

Table S5. Comparison of ID₅₀ values at 12 weeks post administration for VRC07-523LS, VRC01LS, and VRC01

Virus	Dose Group	Virus clade	VRC07-523LS	VRC01LS	VRC01	Fold difference (VRC07-523LS/VRC01LS) ^a
Serum Concentration mcg/mL (SD)						
	5 mg/kg SC		6.7 (1.4), n=7	27 (7.1), n=18	3.7 (1.1), n=3 ^b	0.25
	20 mg/kg IV		45 (12), n=8	163 (53), n=13	5.2 (0.7), n=3	0.28
Neutralization Titer ID₅₀ GMT (SD), n=3						
BG505_W6M_C2	5 mg/kg SC	A	87 (39)	128 (23)	15 (24)	0.68
	20 mg/kg IV		621 (289)	1137 (153)	38 (13)	0.55
Q23.17	5 mg/kg SC	A	120 (35)	133 (15)	9.3 (16)	0.90
	20 mg/kg IV		695 (245)	1123 (157)	9.8 (19)	0.62
CNE59	5 mg/kg SC	AE	23 (8.3)	5 (0)	5 (0)	4.51
	20 mg/kg IV		206 (84)	82 (16)	5 (0)	2.50
BJOX028000_10_3	5 mg/kg SC	AE	339 (127)	16 (7.1)	5 (0)	21.56
	20 mg/kg IV		2899 (1506)	393 (171)	5 (0)	7.37
PVO.04	5 mg/kg SC	B	42 (12)	28 (3.1)	5 (0)	1.50
	20 mg/kg IV		225 (86)	173 (49)	5 (0)	1.30
THRO.18	5 mg/kg SC	B	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		12 (7.4)	13 (12)	5 (0)	0.90
21197826	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		17 (18)	5 (0)	5 (0)	3.46
21369737	5 mg/kg SC	C	38 (7.0)	5 (0)	5 (0)	7.64
	20 mg/kg IV		383 (128)	5 (0)	5 (0)	76.62
21561324	5 mg/kg SC	C	117 (42)	5 (0)	5 (0)	23.49
	20 mg/kg IV		950 (477)	143 (25)	5 (0)	6.64
6322.V4.C1	5 mg/kg SC	C	122 (34)	5 (0)	5 (0)	24.32
	20 mg/kg IV		843 (314)	8.8 (13)	5 (0)	96.11
6631_V3	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		28 (36)	5 (0)	5 (0)	5.59
CAP210	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		8.7 (12)	11 (31)	5 (0)	0.76
CAP382_2	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		14 (14)	5 (0)	5 (0)	2.83
CT565_C7	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		5 (0)	5 (0)	5 (0)	1.00
DU156.12	5 mg/kg SC	C	162 (25)	101 (4.6)	8.2 (9.8)	1.60
	20 mg/kg IV		1046 (462)	692 (87)	11 (8.0)	1.51
MW965.26	5 mg/kg SC	C	339 (97)	203 (44)	36 (36)	1.67

	20 mg/kg IV		2104 (685)	1473 (440)	49 (6.5)	1.43
ZM249M_PL1	5 mg/kg SC	C	84 (46)	79 (22)	5 (0)	1.06
	20 mg/kg IV		854 (522)	1208 (602)	5 (0)	0.71
ZM53M_PB12	5 mg/kg SC	C	8.5 (11)	5 (0)	5 (0)	1.70
	20 mg/kg IV		100 (31)	80 (41)	5 (0)	1.25
3016_V5	5 mg/kg SC	D	80 (7.7)	132 (32)	9.7 (18)	0.60
	20 mg/kg IV		585 (232)	894 (41)	21 (2.8)	0.65
57128_VR	5 mg/kg SC	D	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		19 (19)	7.4 (6.4)	5 (0)	2.59

IV= intravenous, SC= subcutaneous

^aFold difference (VRC07-523LS/VRC01LS) was calculated as the ID₅₀ GMT of VRC07-523LS divided by the ID₅₀ GMT of VRC01LS.

^bSubjects who received VRC01 at 5mg/kg SC received 2 doses of antibody: at weeks 0 and 4.

ID₅₀ values <10 are calculated as 5.

Table S6. Comparison of ID₈₀ values at 12 weeks post administration for VRC07-523LS, VRC01LS, and VRC01

Virus	Dose Group	Virus clade	VRC07-523LS	VRC01LS	VRC01	Fold difference (VRC07-523LS/VRC01LS) ^a
Serum Concentration mcg/mL (SD)						
	5 mg/kg SC		6.7 (1.4), n=7	27 (7.1), n=18	3.7 (1.1), n=3 ^b	0.25
	20 mg/kg IV		45 (12), n=8	163 (53), n=13	5.2 (0.7), n=3	0.28
Neutralization Titer ID₈₀ GMT (SD), n=3						
BG505_W6M_C2	5 mg/kg SC	A	28 (15)	50 (17)	7.4 (6.4)	0.56
	20 mg/kg IV		214 (125)	284 (42)	8.3 (3.3)	0.76
Q23.17	5 mg/kg SC	A	41 (14)	45 (1.3)	5 (0)	0.91
	20 mg/kg IV		255 (125)	363 (8.7)	5 (0)	0.70
BJOX028000_10_3	5 mg/kg SC	AE	113 (41)	5 (0)	5 (0)	22.55
	20 mg/kg IV		830 (337)	44 (23)	5 (0)	19.05
CNE59	5 mg/kg SC	AE	6.7 (4)	5 (0)	5 (0)	1.34
	20 mg/kg IV		65 (19)	28 (1.3)	5 (0)	2.32
PVO.04	5 mg/kg SC	B	7.8 (7.9)	5 (0)	5 (0)	1.55
	20 mg/kg IV		85 (34)	58 (5.9)	5 (0)	1.37
THRO.18	5 mg/kg SC	B	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		6.5 (3.3)	5 (0)	5 (0)	1.29
21197826	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		7.0 (5.1)	5 (0)	5 (0)	1.40
21369737	5 mg/kg SC	C	8.1 (9.4)	5 (0)	5 (0)	1.62
	20 mg/kg IV		138 (64)	5 (0)	5 (0)	27.55
21561324	5 mg/kg SC	C	32 (20)	5 (0)	5 (0)	6.32
	20 mg/kg IV		331 (200)	5 (0)	5 (0)	66.25
6322.V4.C1	5 mg/kg SC	C	13 (13)	5 (0)	5 (0)	2.65
	20 mg/kg IV		159 (51)	5 (0)	5 (0)	31.8
6631_V3	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		5 (0)	5 (0)	5 (0)	1.00
CAP210	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		5 (0)	5 (0)	5 (0)	1.00
CAP382_2	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		7.1 (5.4)	5 (0)	5 (0)	1.42
CT565_C7	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		5 (0)	5 (0)	5 (0)	1.00
DU156.12	5 mg/kg SC	C	55 (11)	39 (8.0)	5 (0)	1.41
	20 mg/kg IV		397 (125)	230 (31)	5 (0)	1.73
MW965.26	5 mg/kg SC	C	101 (12)	76 (25)	9.1 (15)	1.33

	20 mg/kg IV		763 (425)	435 (141)	18 (3.9)	1.76
ZM249M_PL1	5 mg/kg SC	C	18 (10)	41 (16)	5 (0)	0.45
	20 mg/kg IV		208 (86)	234 (61)	5 (0)	0.89
ZM53M_PB12	5 mg/kg SC	C	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		37 (14)	27 (25)	5 (0)	1.37
3016_V5	5 mg/kg SC	D	24 (7.4)	47 (12)	5 (0)	0.51
	20 mg/kg IV		202 (87)	353.4 (60)	5 (0)	0.57
57128_VR	5 mg/kg SC	D	5 (0)	5 (0)	5 (0)	1.00
	20 mg/kg IV		5 (0)	5 (0)	5 (0)	1.00

IV= intravenous, SC= subcutaneous

^aFold difference (VRC07-523LS/VRC01LS) was calculated as the ID₈₀ GMT of VRC07-523LS divided by the ID₈₀ GMT of VRC01LS.

^bSubjects who received VRC01 at 5mg/kg SC received 2 doses of antibody: at weeks 0 and 4.

ID₈₀ values <10 are calculated as 5.

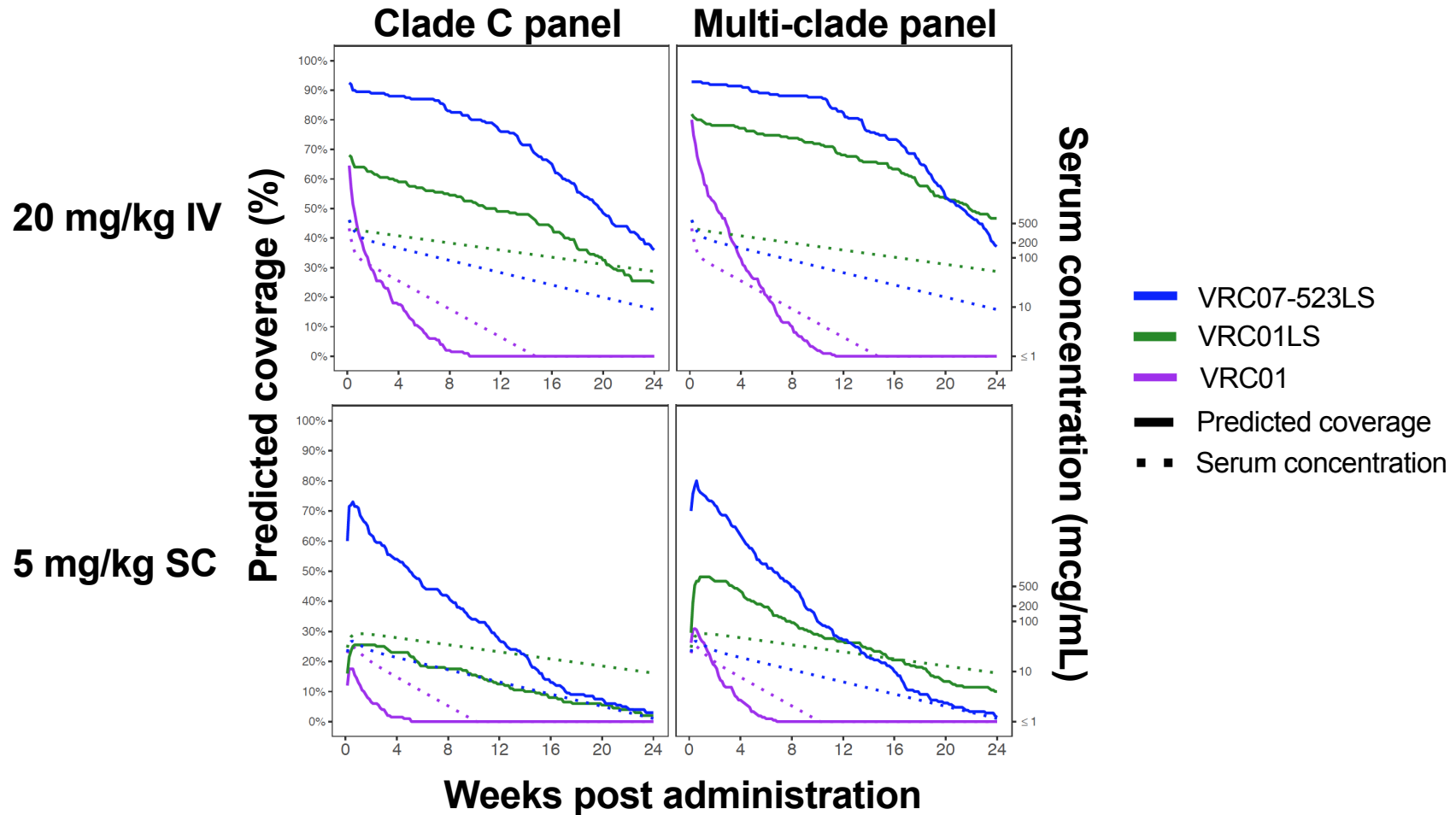


Figure S6. Predicted coverage of VRC07-523LS, VRC01LS, and VRC01 for the first 24 weeks after a single administration based on known IC_{80} values. Predicted coverages shown for either 20 mg/kg IV (top panels) or 5 mg/kg SC (bottom panels). The left panels display the percentage of viruses with predicted coverage based on a panel of acute/early clade C Env-pseudoviruses, while the right panels display the predicted coverage based on a panel of diverse multi-clade Env-pseudoviruses. Predicted coverage at a given concentration was defined as the % of viruses for which the IC_{50} value was 100-fold higher than the serum concentration, and a virus was considered resistant if the IC_{50} was greater than 10 mcg/mL. The solid lines indicate the geometric mean of the predicted coverage for each bnMAB and the dotted lines reference the serum concentrations for the subjects in each dose group.