

cA20Vk

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GACATCCAGCTGACCCAGTCTCCAGCAATCCTGTCTGCATCTCCAGGGGAGAGGTCACATGACTTGCAGGGCCAGCTCAAGTAACT 90
1 27 29 30
D I O L T Q S P A I L S A S P G E K V T M T C R A S S V S
CDR1
TACATCCACTGGTTCAGGAGAGCCAGGATCCTCCCCCAACCCCTGGATTATGCCACATCCAACTGGCTTCTGGAGTCCCTGTTCGC 180
40 50 60
Y I H W F Q Q K P G S S P K P W I Y A T S N L A S G V P V R
CDR2
TTCAGTGGCAGTGGGTCTGGGACTTCTTACTCTCTCACAATCAGCAGAGTGGAGGCTGAAGATGCTCCCACTTATTACTGCCAGCAGTGG 270
70 80 90
F S G S G S G T S Y S L T I S R V E A E D A A T Y Y C Q Q W
CDR3
ACTAGTAACCCACCCAGTTCGGAGCGGGGACCAAGCTGGAGATCAAA 318
100 107
T S N P P T F G G G T K L E I K

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FIG. 1A

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CA20VH

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CAGGTCCAACTGCAGCAGCCCTGGGGCTGAGCTGGTGAACCTGGGGCTCAGTGAAGATGTCCTGCAAGGCTTCTGGCTACACATTACG 90
1 Q V Q L Q Q P G A E L V K P G A S V K M S C K A S G Y T F T 30
AGTTACAATATGCACCTGGTAAACAGACACACCTGGTCGGGGCTGGAAATGGATTGGAGCTATTATCCCGGAAATGGTGATCTTCCTAC 180
40 S Y N M H W V K Q T P G R G L E W I G A I Y P G N G D T S Y
CDR1 50 52 A
CDR2
AATCAGAAGTTCAAAGGCNAGGCCACATTTGAGTGCAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGAGGAC 270
60 N Q K F K G K A T L T A D K S S S T A Y M Q L S S L T S E D 80 82 A B C
TCTGCGGTCTATTACTGTGCAAGATCGACTTACTACGGCGGTGACTGGTACTTCGATGTCCTGGGGCCCAAGGACCCAGCGTCAACGCTCTCC 360
90 S A V Y Y C A R S T Y Y G G D W Y F D V W G Q G T T V T V S 100 A B C D 110
CDR3
TCA 363
113
S

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FIG. 1B

XbaI

tctagacacaggacctcaccatATGGGATGGAGCTGTATCATCTCTTCTTGGTAGCAACAGCTACAggtgta -91
M G W S C I I L F L V A T A T -5

AggggctcacagtagcaggcttgagggtctggacatatatatggggtgacaaatgacatccacttttgccctttctctccacAGGTGTCTCCACTCC -1
G V H S -1

PvuII

GACATCCAGCTGACCGCAGTCTCCATCATCTCTGAGCGCATCTGTTGGAGATAGGGTCACTATGACTTGTAGGGCCAGCTCAAGTGTAAAGT 90
D I Q L T Q S P S S L S A S V G D R V T M T C R A S S S V S 30
CDR1

TACATCCACTGGTTCAGCAGAAACCAGGGAAGCCACCTAAACCCTGGATTTAAGCCACTTGGAACTGGCTTCCTGGTGTCCCTGTCCGA 180
Y I H W F Q Q K P G K A P K P W I Y A T S N L A S G V P V R 61
CDR2

TTCTCTGGCAGCGGATCTGGGACAGATTACACTTTCACCATCAGCTCTCTTCAACCAGAGACATTTGCAACATATTTATGTACAGCAGTGG 270
F S G S G S G T D Y T F T I S S L Q P E D I A T Y Y C Q Q W 91

BglII/BclI

ACTAGTAACCCACCCACGTTCCGTTGGAGGGACCAAGCTGGAGATCAAAAGTgagtagaattttaaacttttgcttcctcagttcgatcc 357
T S N P P T F G G G T K L E I K 107

BamHI

FIG. 2A

xhoI
 -91 ctccagacacacaggaacctcaccatgggatggagctgtatcatcctcttcttggtagaacagctacaggtta
 -5 M G W S C I I L F L V A T A T
 -1 Aggggtccacagtagcaggcttcaggctcggacatatatatgggtgacaatgacatccactttgcctcttctctccacaggtgtccactcc
 -1 G V H S
 PstI
 90 CAGGTCCAACCTGCAGCAATCAGGGGCTGAAGTCAAGAAACCTGGTCATCGGTGAAGCTCTCCTGCAAGGCTTCTGGCTACACCTTTACT
 30 Q V Q L Q Q S G A E V K K P G S S V K V S C K A S G Y T F T
 180 AGTTACAAATATGCATCTGGGTCAAGCAGGCACCTGGACAGGGTCTGGAAATGGATGGAGCTATTTATCCGGAAATGGTGATACTTCTCTAC
 59 S Y N M H W V K Q A P G Q G L E W I G A I Y P G N G D T S Y
 CDR1
 270 AATCAGAGATTCAAGGTAAGCCACACTGACTGCCAGCAATCCACCAATACAGCTACATGGAGCTGAGCAGCTCAGGTCTGAGGAC
 86 N Q K F K G K A T L T A D E S T N T A Y M E L S S L R S E D
 BstEII
 360 AACGGCATTTTATTACITGCAAGATCGACTTACTACGGCGGTGACTGGTACTTCGATGTCTGGGGCCAAAGGCACCGCTCACCGTCTCC
 112 T A F Y Y C A R S T Y Y G G D W Y F D V W G Q G T T V T V S
 CDR3
 450 TCAGTgagtccttacaacccctctctctctattccagcttaaatagattttactgcatttggtgggggggaaatgtgtgtatctgaatttc
 113 S
 BamHI
 540 Aggtcatgaaggactaggacacacctgggagtcagaaagggctcatgggagcccggtgatgcagacagacatcctcagctcccagact
 565 tcatggccagagatttataggatcc

FIG. 2B

FIG. 3A

	1	10	20	30	40
cA20VH	QVQLQQPGAELVKPGASVKMSCKASGYTFT	SYNMH	WVKQT		
c2B8VH					
hA20VH	S...VK...S...V.....				A

	50	52 A	60	70
cA20VH	PGRGLEWIG	AIYPGN	GDTSYNQKFKG	KATLTADKSSSTAY
c2B8VH				
hA20VH	..Q.....			E.TN...

	80	82 A B C	90	100 A B C D	110	113
cA20VH	MLSSLTSEDSAVYYCAR	STYYGGDWYFDV	WGQGTITVTVSS			
c2B8VH			N			
hA20VH	R...T.F.....					S

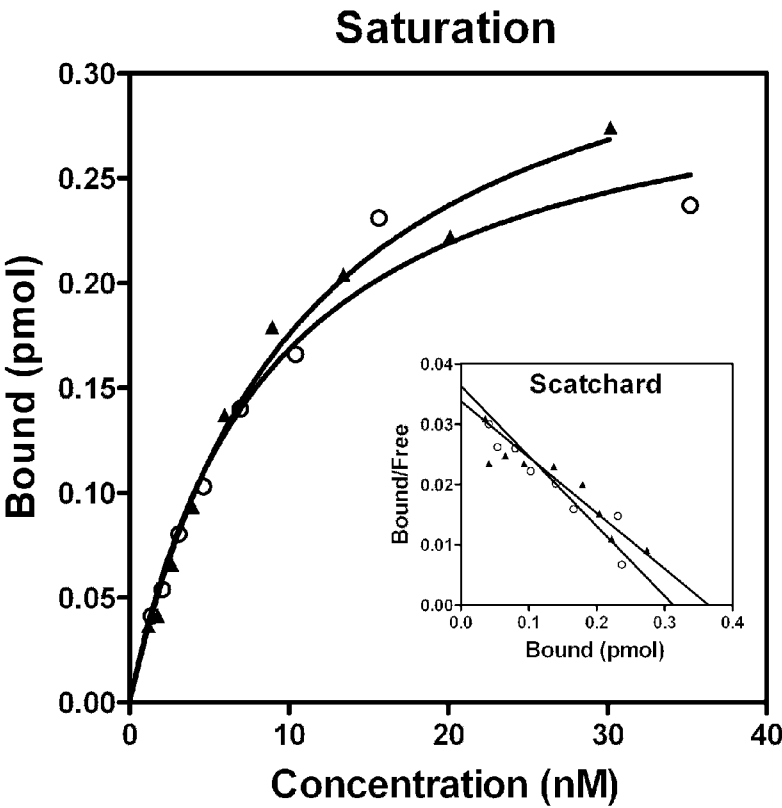
FIG. 3B

	1	10	20	28	30	40
cA20Vk	DIQLTQSPAILSASPGEKVTMT	CRA	SSVS	YIH	WFQ	QKP
c2B8Vk	Q.V.S.....					
hA20Vk	SS...V.DR.....					

	50	60	70	80
cA20Vk	GSSPKPWII	ATSNLAS	GVPVRFSGSGSGTSYSLTISRVEA	
c2B8Vk				
hA20Vk	..KA.....		D.TF...SLQP	

	90	100	108
cA20Vk	EDAATYYC	QQWTSNPPT	FGGGTKLEIKR
c2B8Vk			
hA20Vk	..I.....		

FIG. 4



	B _{max} (pmol)	K _d (nM)
▲ veltuzumab	0.3646	10.79
○ rituximab	0.3131	8.625

FIG. 5

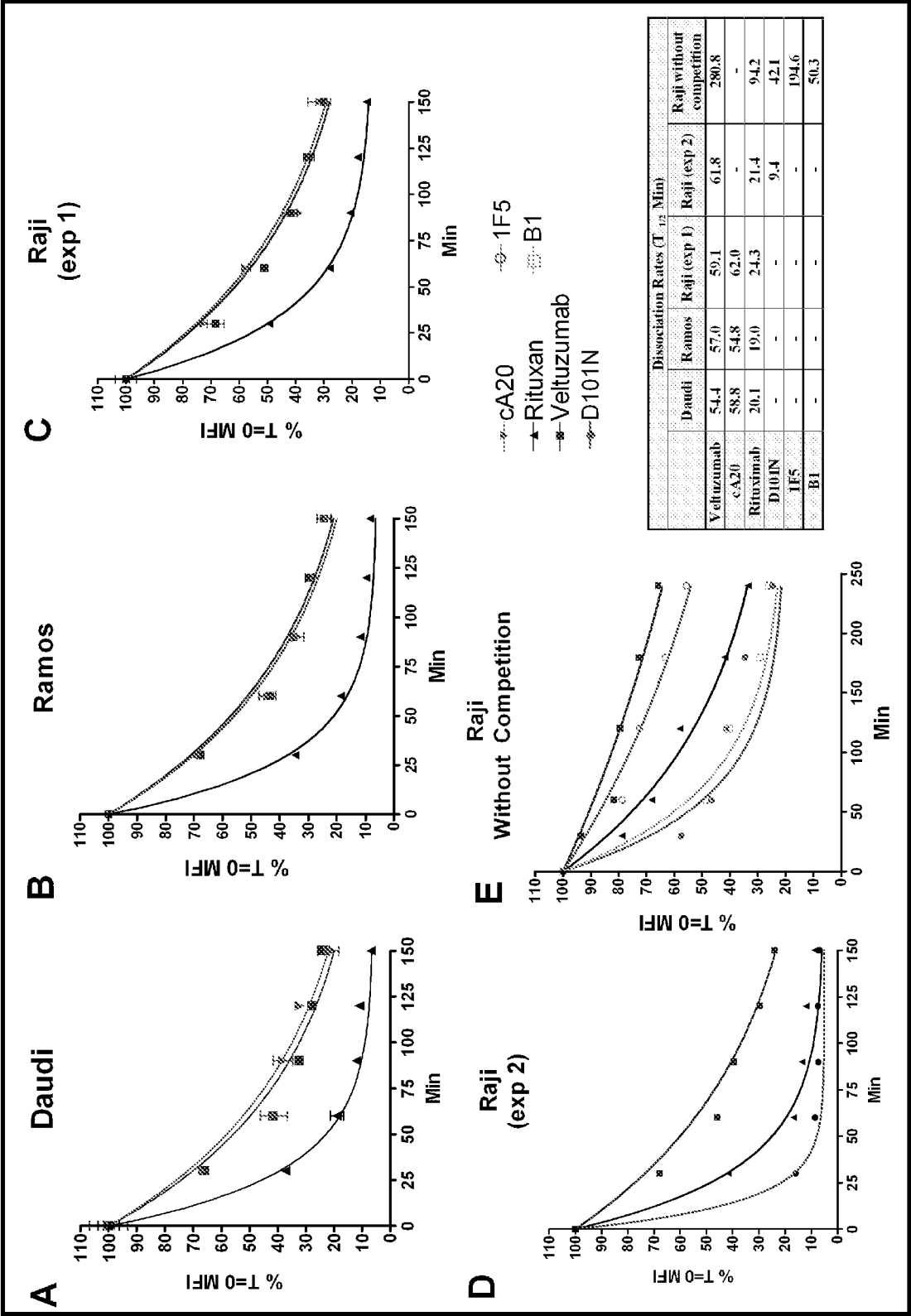


FIG. 6

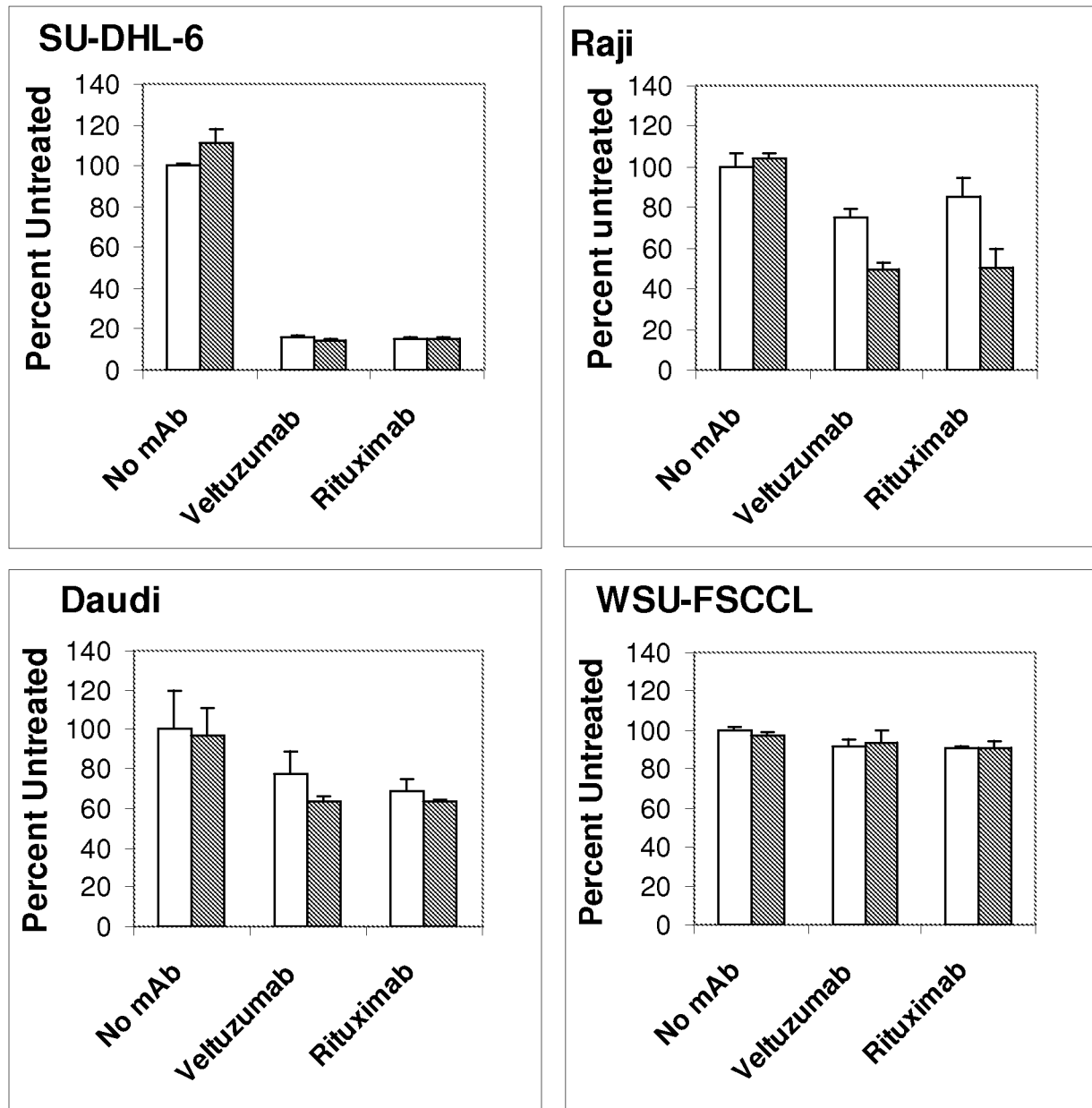


FIG. 7

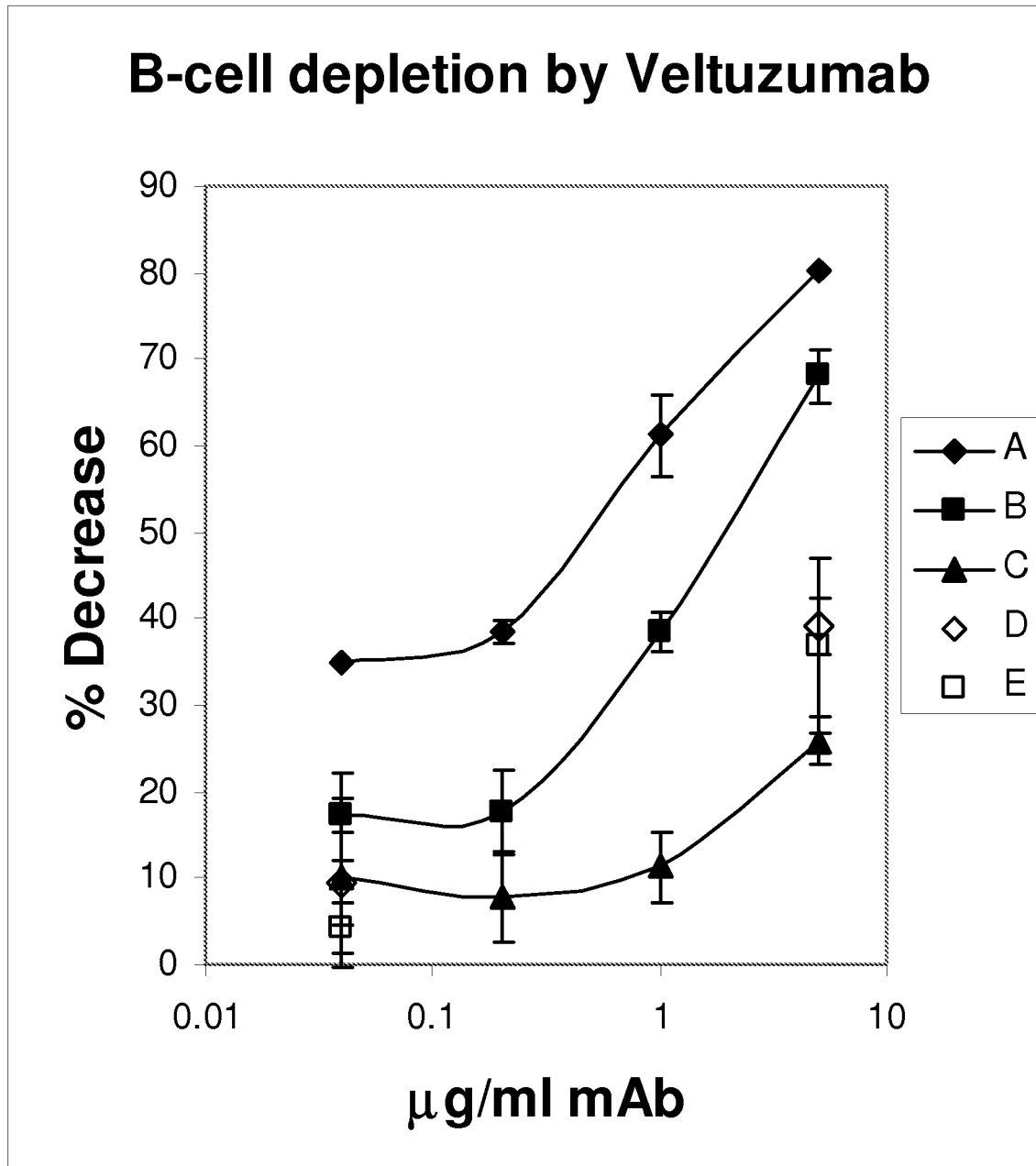


FIG. 8

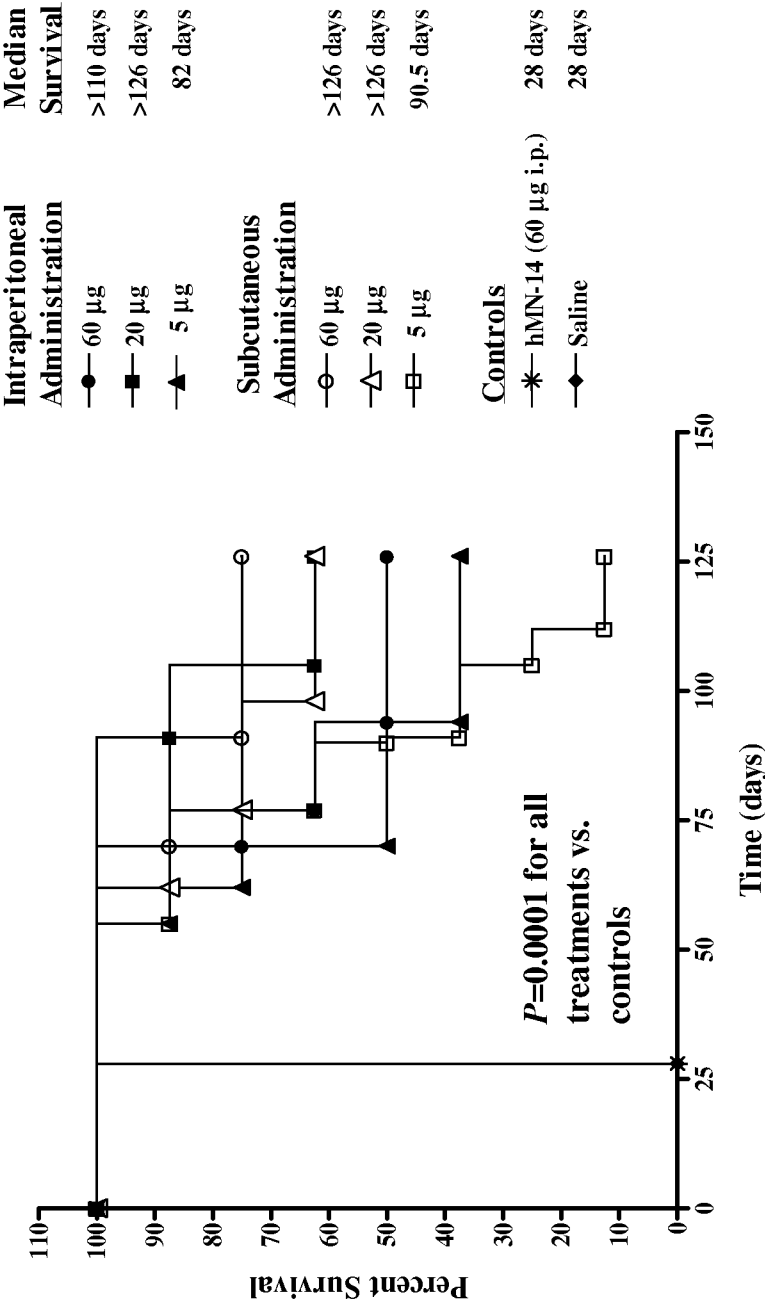


FIG. 9

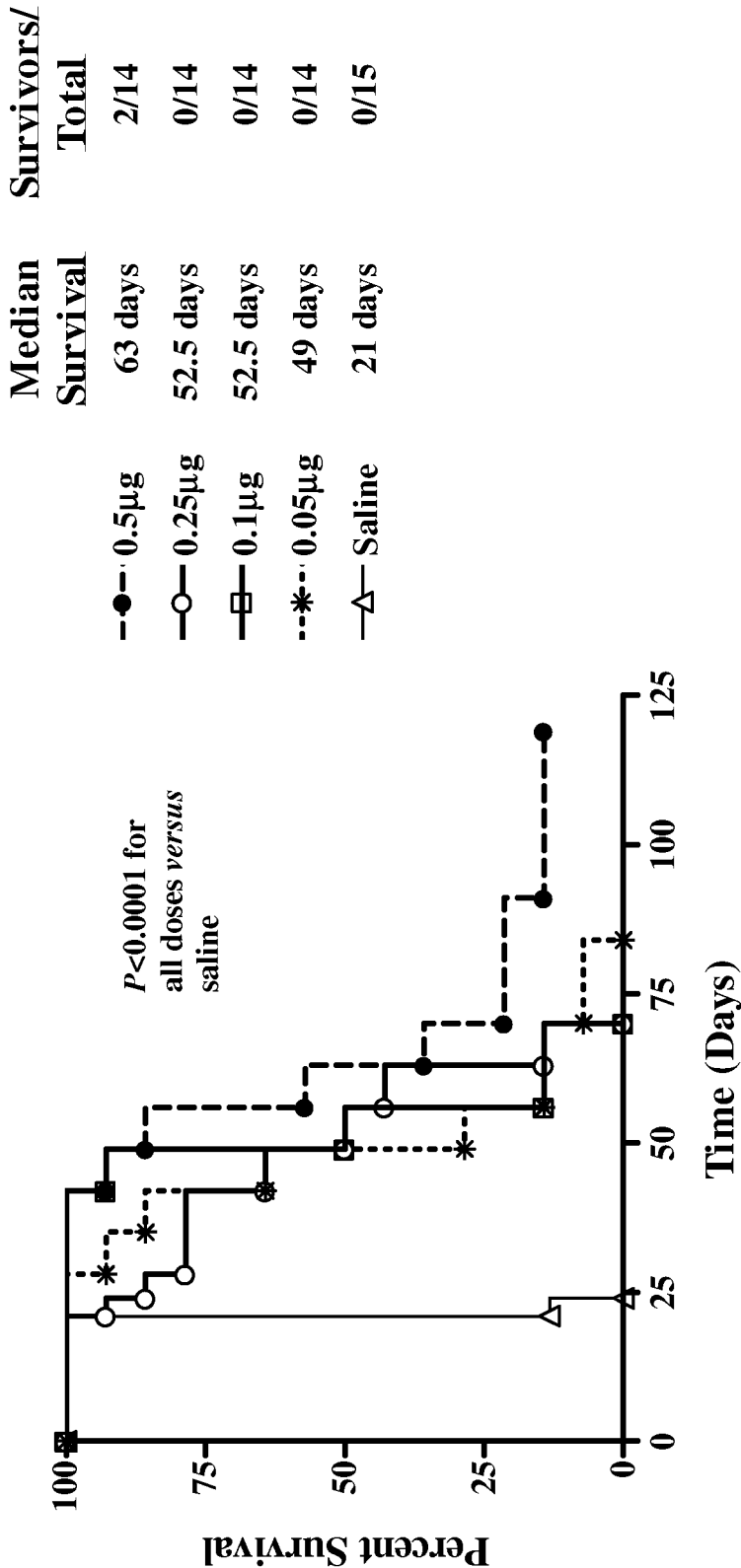


FIG. 10

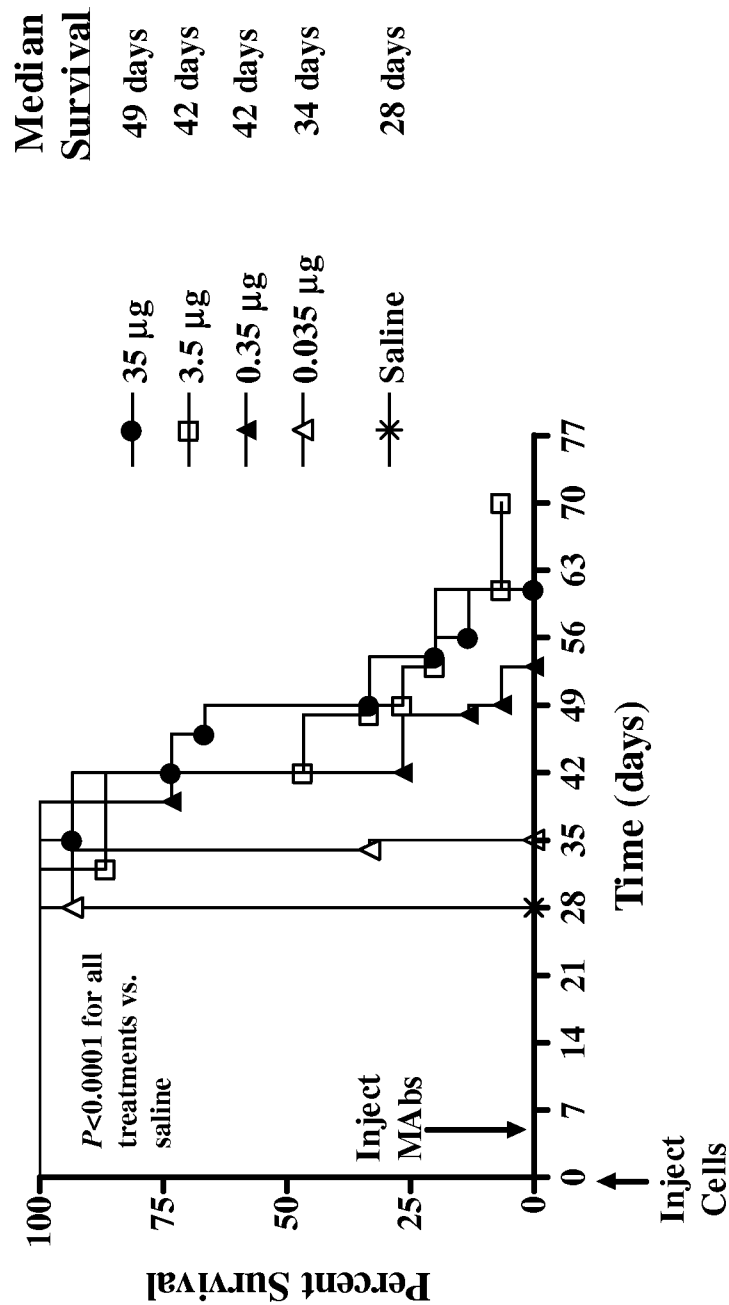


FIG. 11

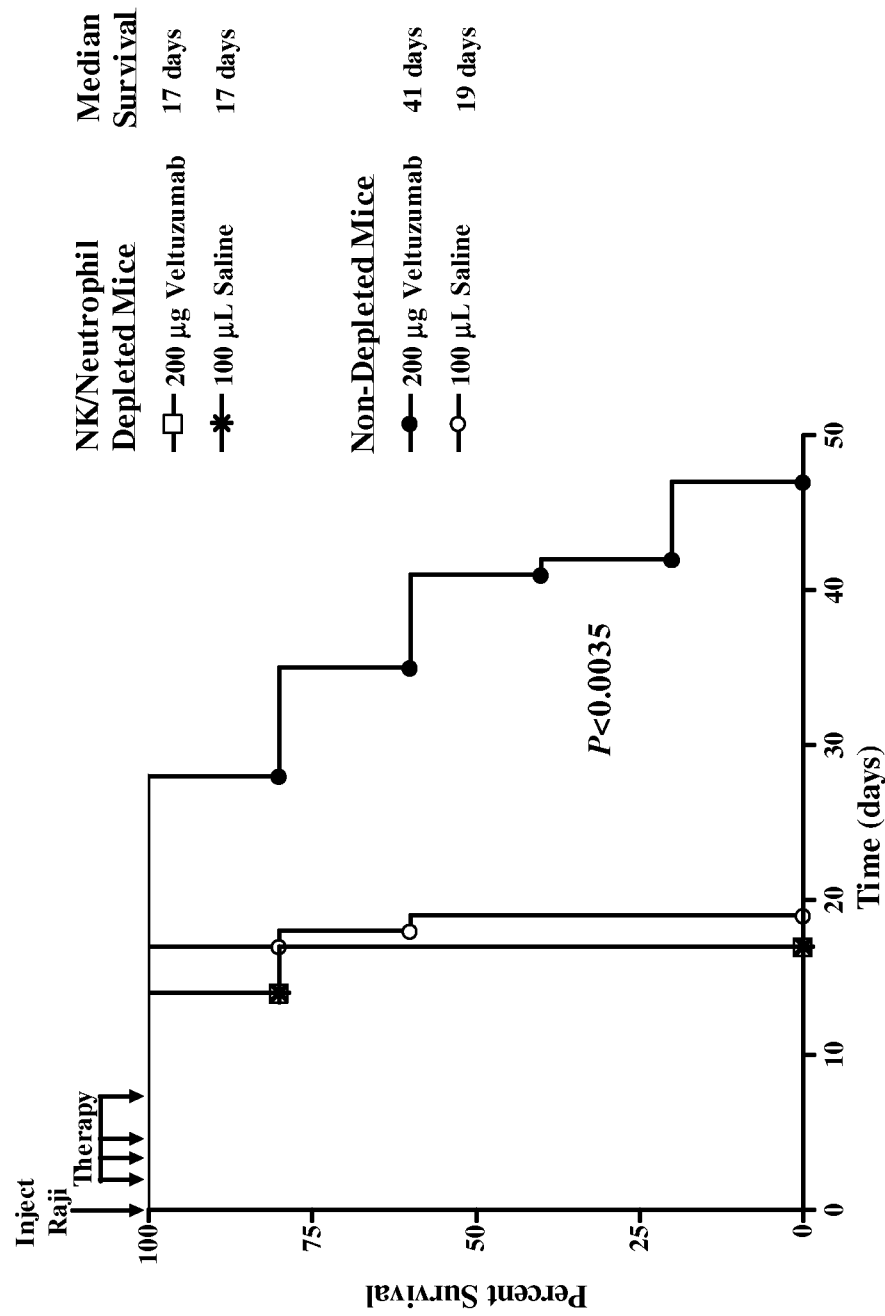


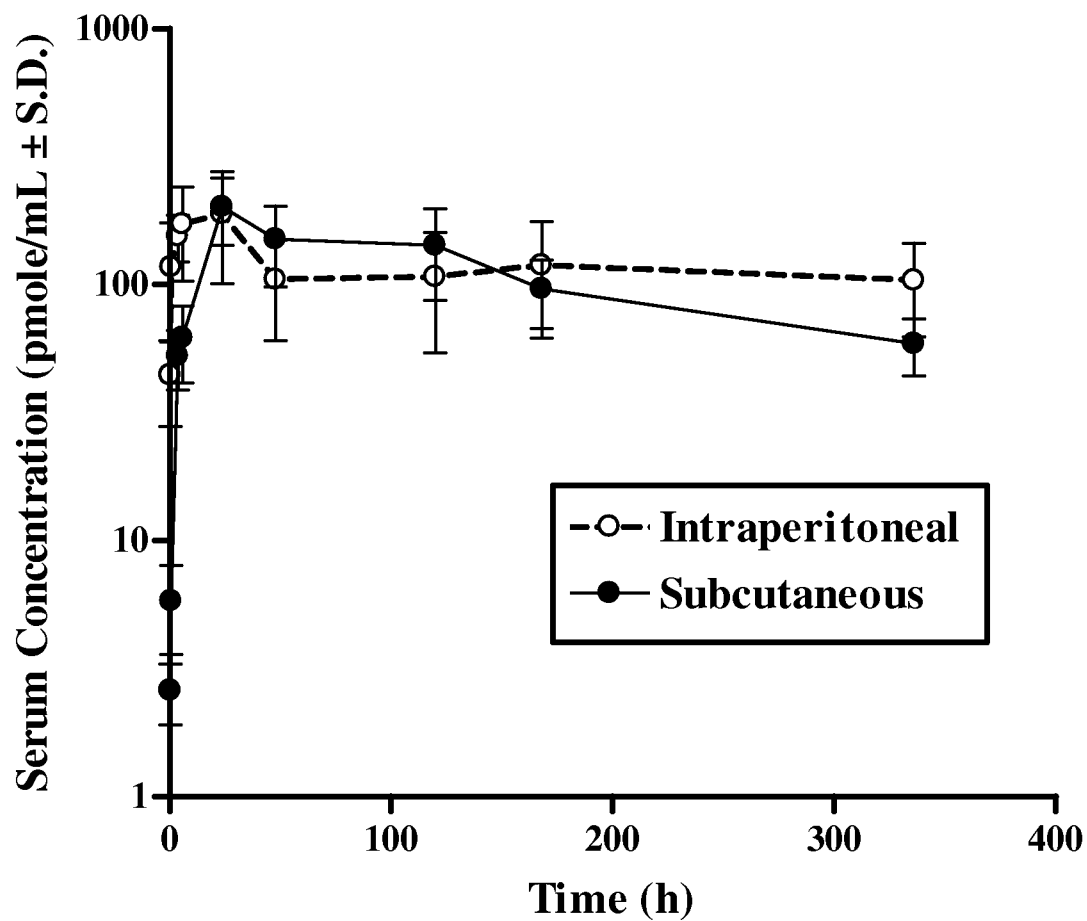
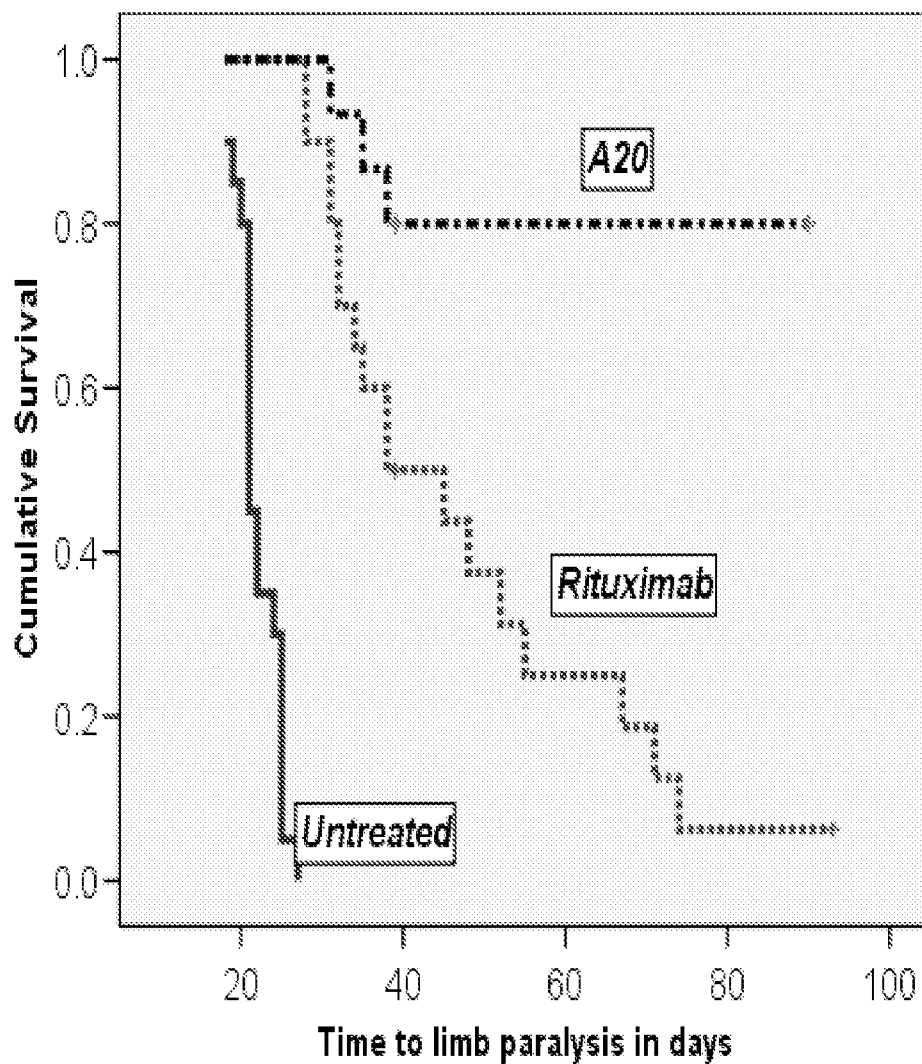
FIG. 12

FIG. 13

Treatment	Mean			
	Estimate	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Untreated	22.100	.575	20.972	23.228
Rituximab	47.913	4.362	39.364	56.461
Veltuzumab (hA20)	78.933	5.724	67.714	90.153

FIG. 14

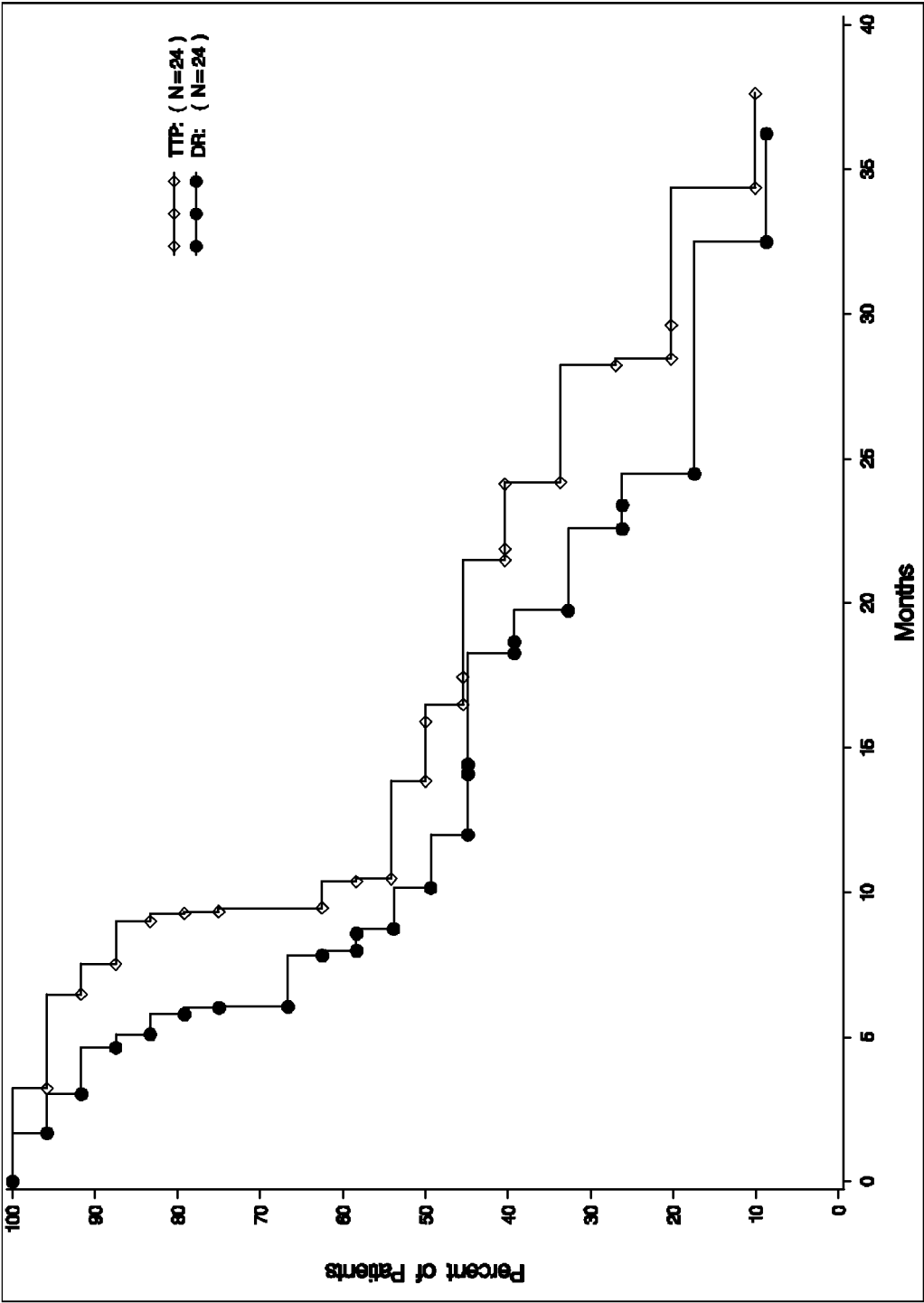


FIG. 15

