

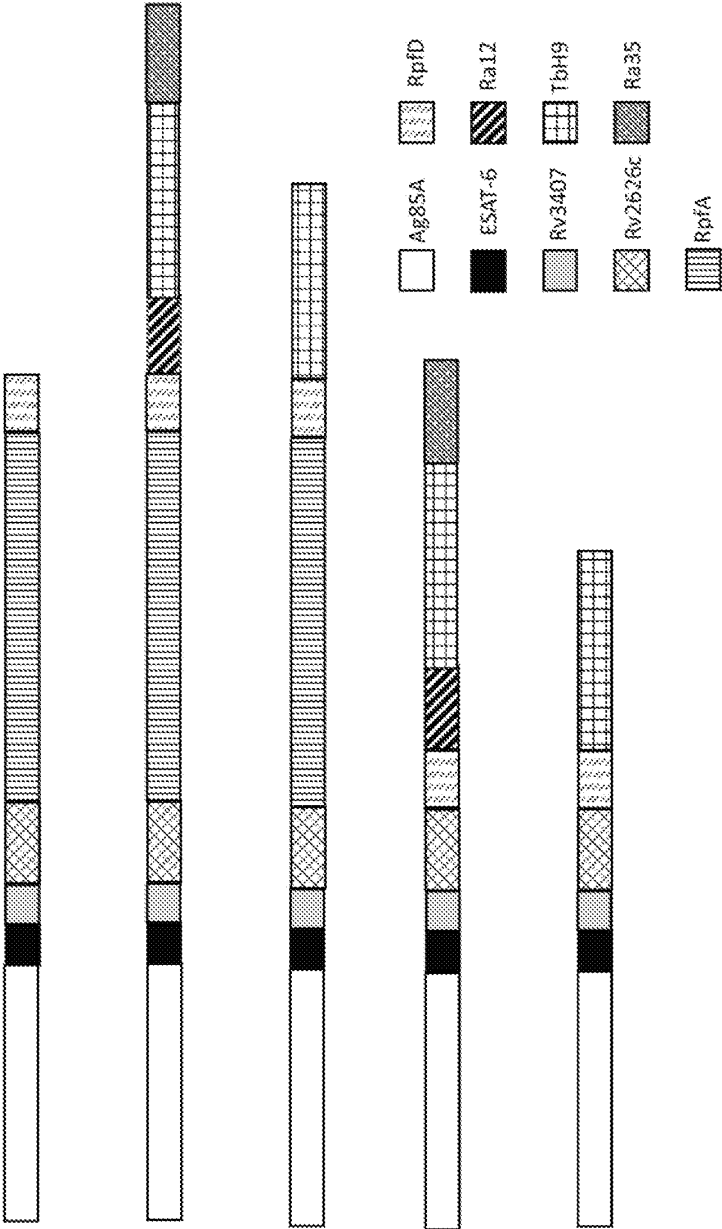


FIG. 1

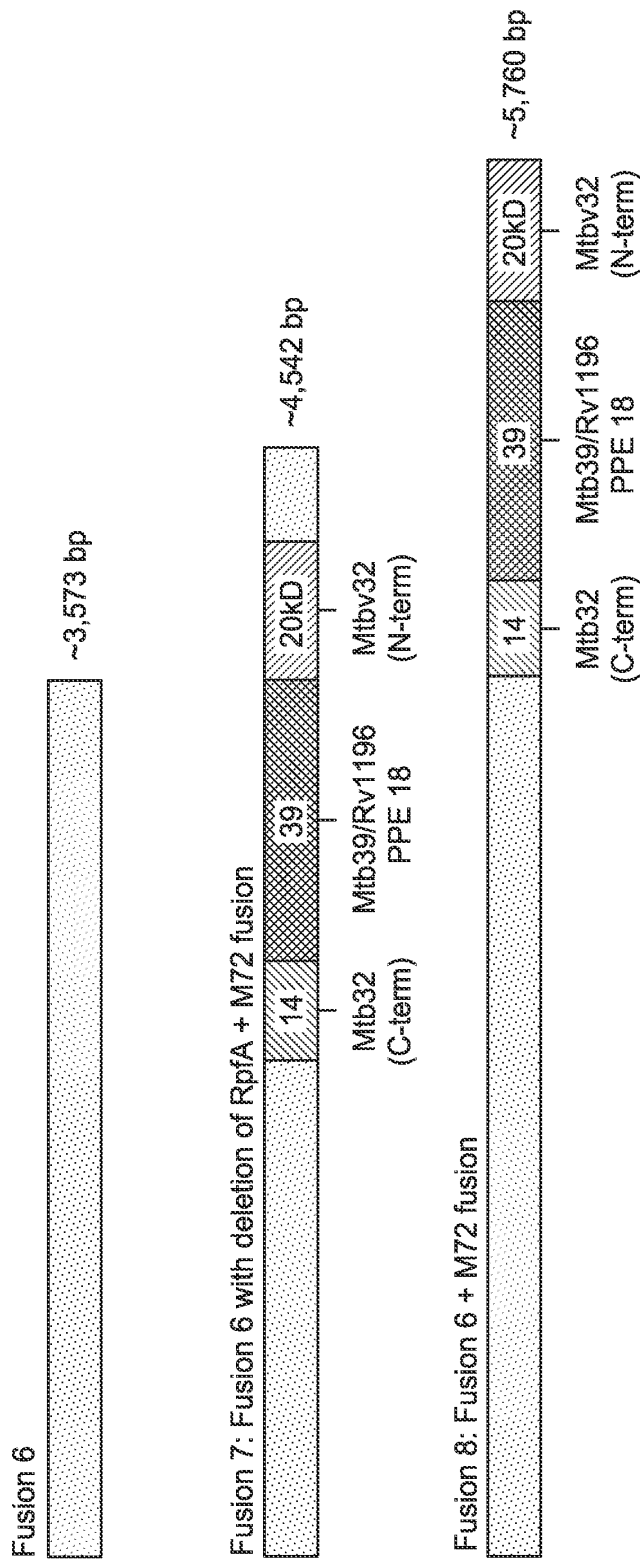


FIG. 2

Antigen	aa	Stage	Aligned isolates/ position	# positions / % of sequence <99.55% conservation	Max variation rate
Ag85A	297	Active	4005	104 aa / 35%	6.2%
ESAT-6	94	Active	4397	27 aa / 29%	2.5%
Rv3407 (VapB47)	98	Latent	1717	2 aa / 2%	20.5%
Rv2626c (Hrp1)	142	Latent	4341	0 aa / 0%	0.1%
RpfA	406	Reactivation	2840*	12 aa / 3 %	12.3%
RpfD	153	Reactivation	4581	1 aa / <1%	0.8%
Mtb32 (PepA)	323	Serine protease	3911	0 aa / 0%	0.4%
Mtb39 (PPE18)	391	PPE gene family	1575	41 aa / 10%	40% (aa 287)

*Retrieved isolates with annotated "Rv0867c": 4884 strains/isolates but minimum number of aligned isolates per position: 2840 strains/isolates = many strains with much smaller protein

FIG. 3

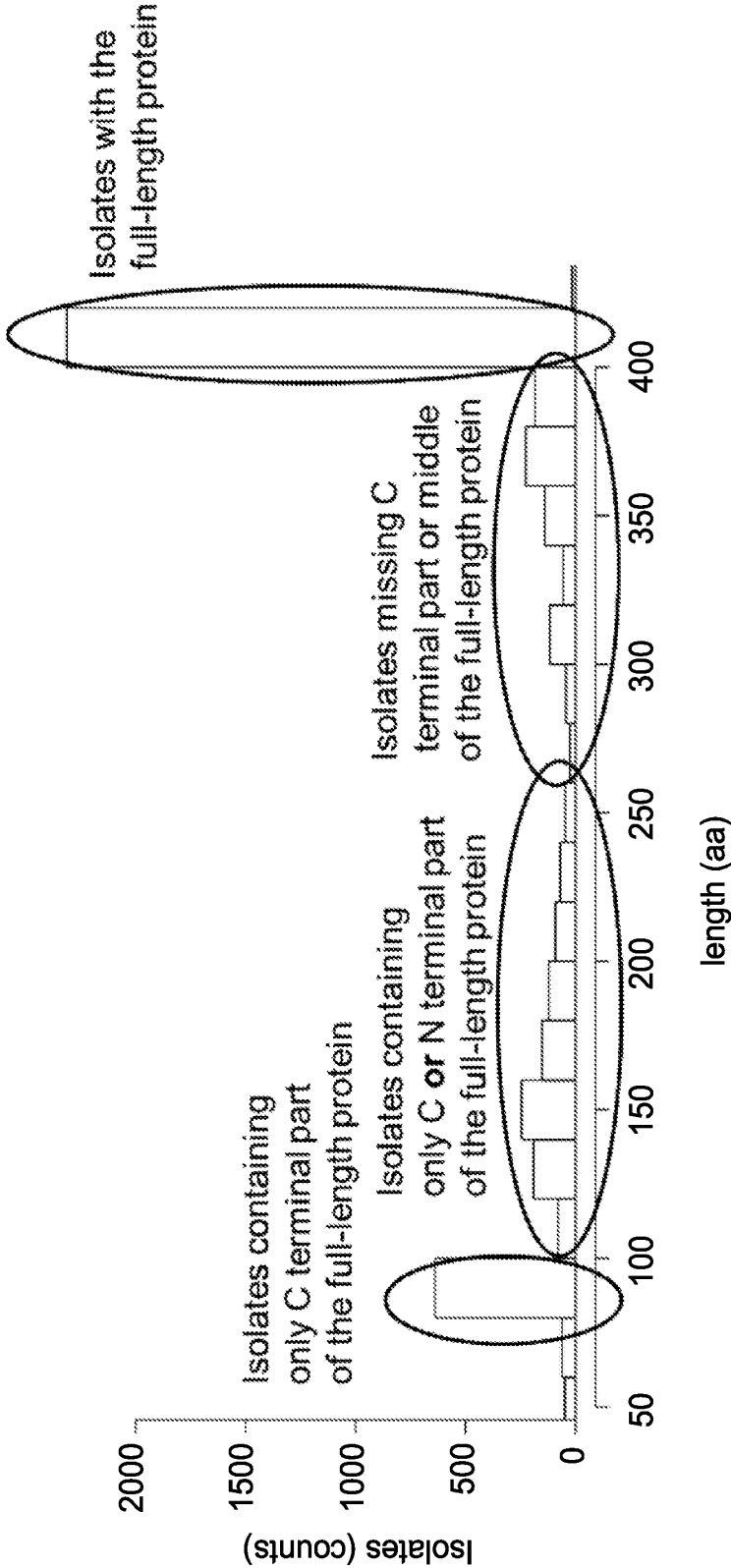


FIG. 4

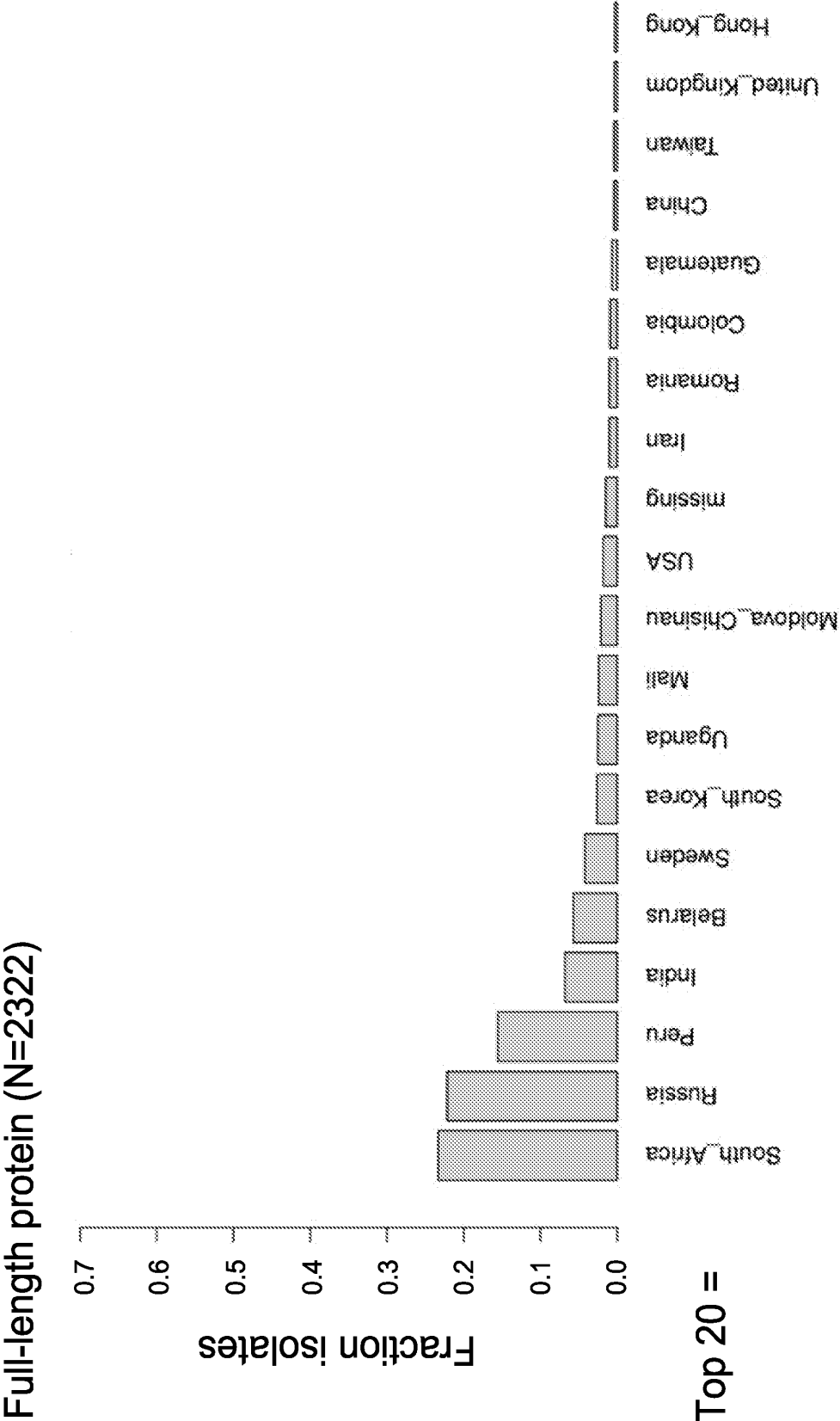


FIG. 5

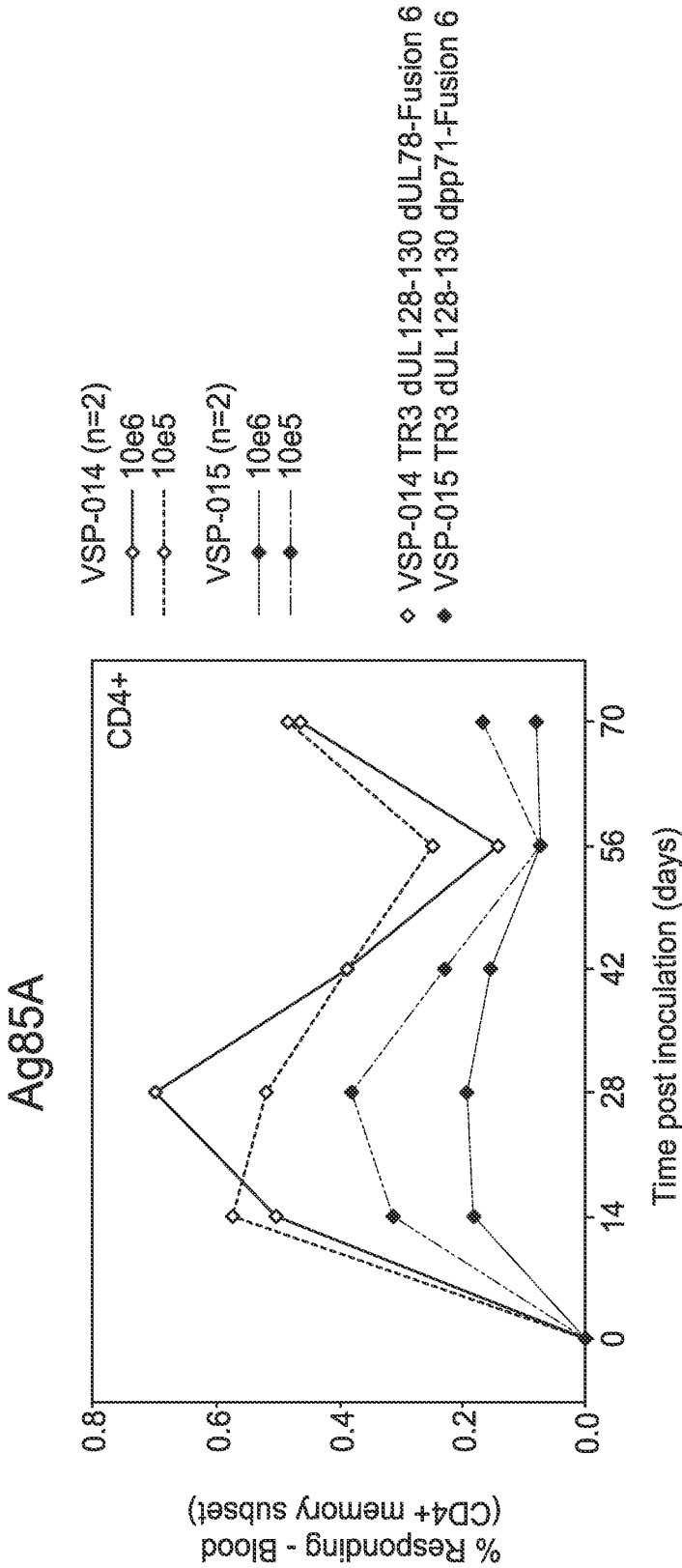


FIG. 6A

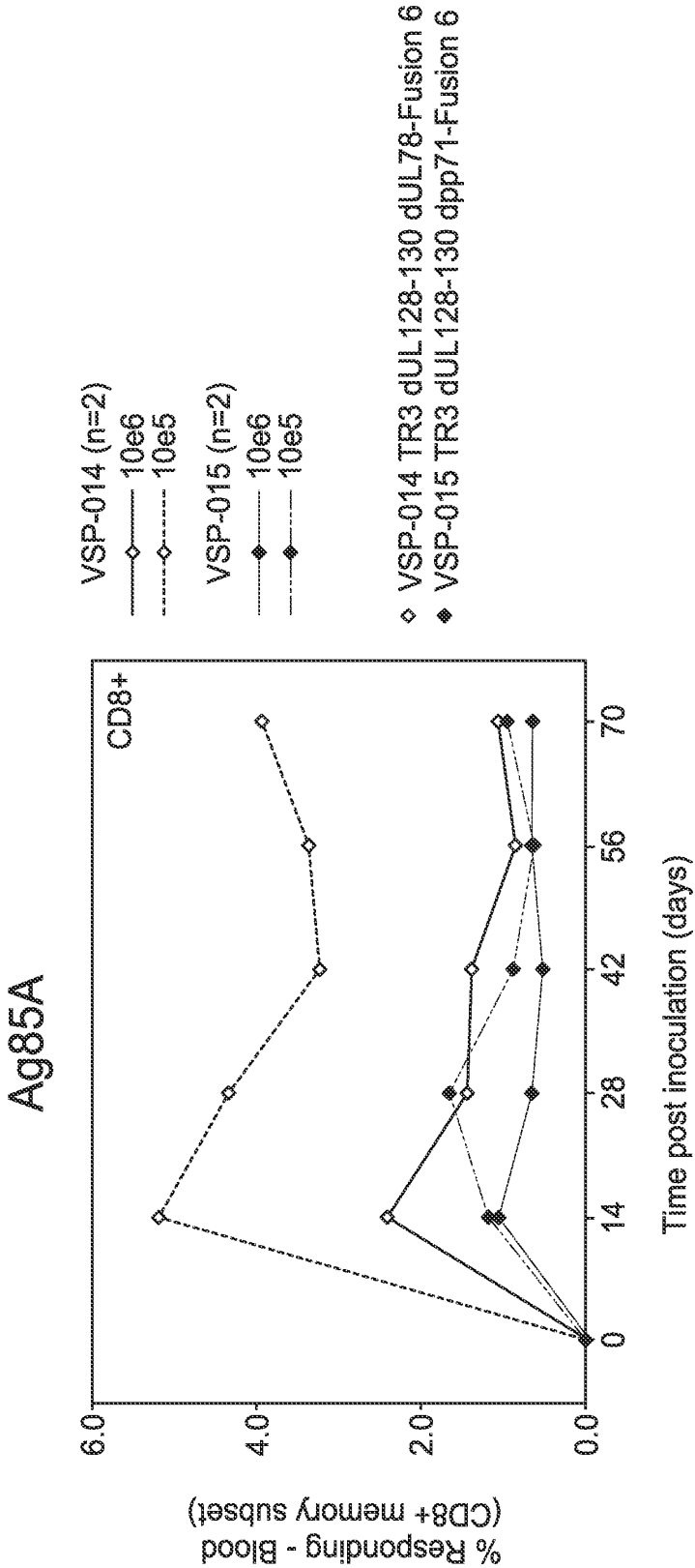


FIG. 6B

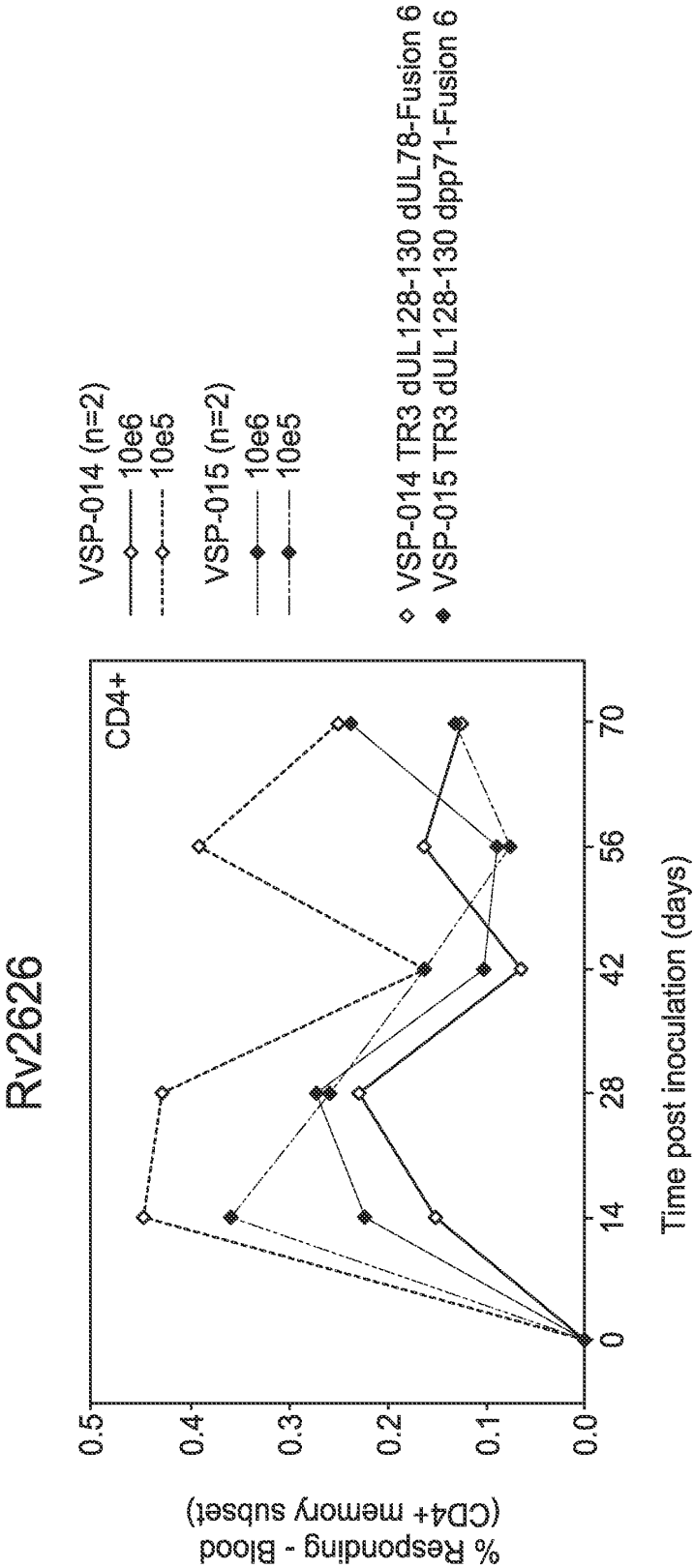


FIG. 6C

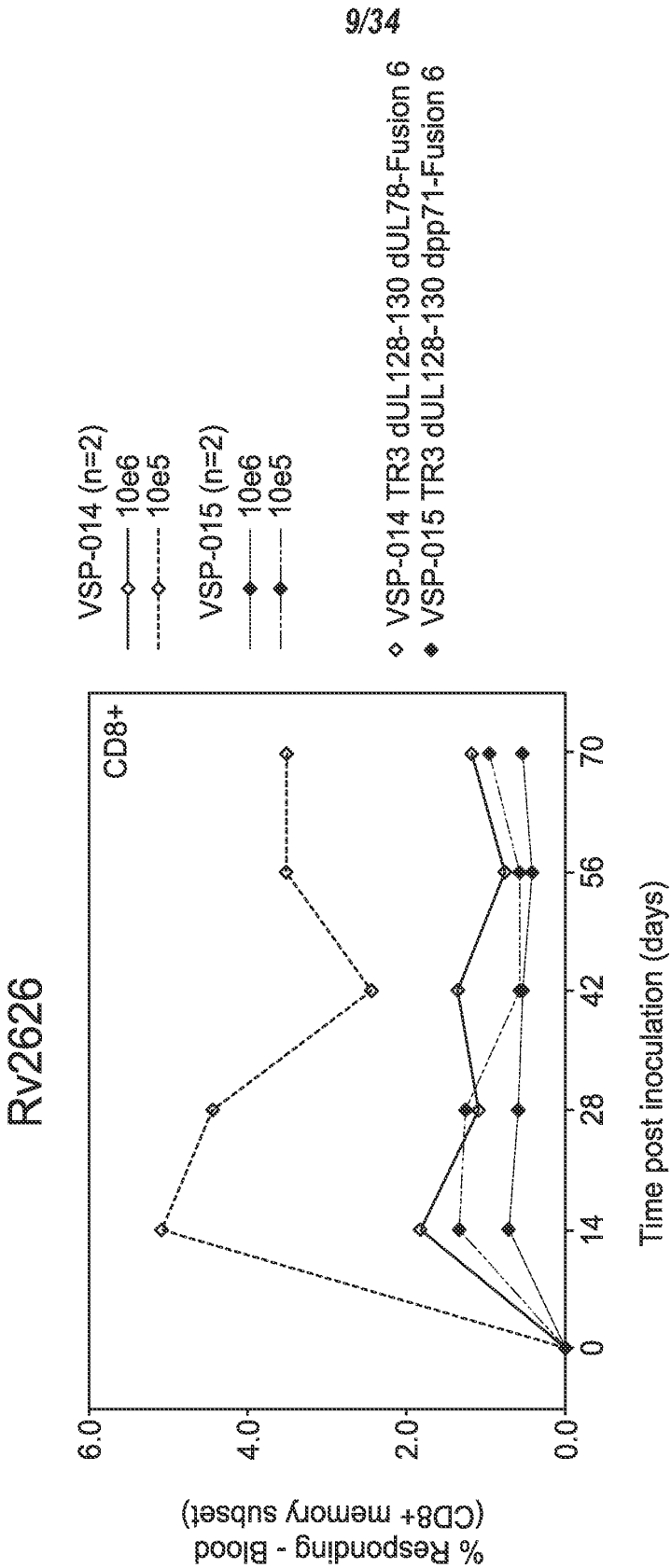


FIG. 6D

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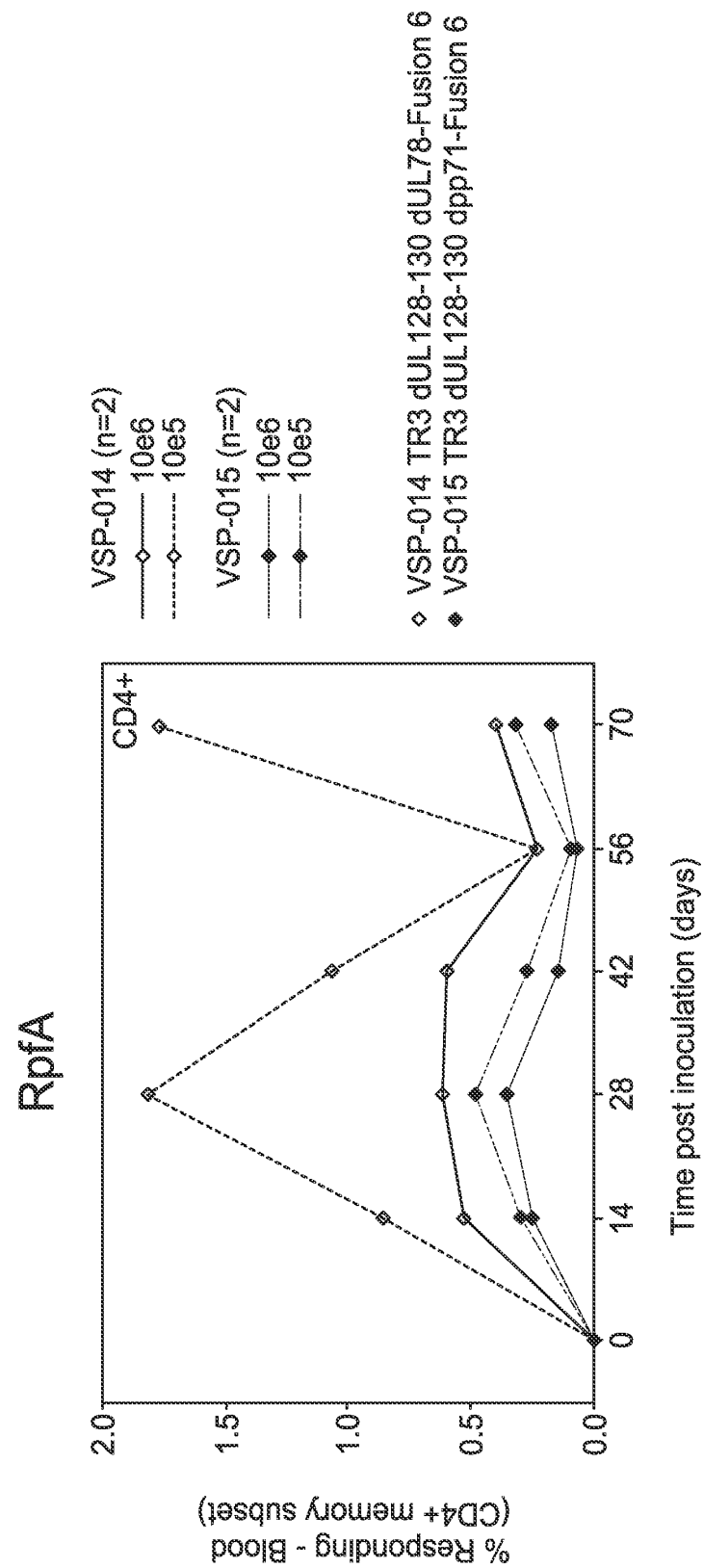


FIG. 6E

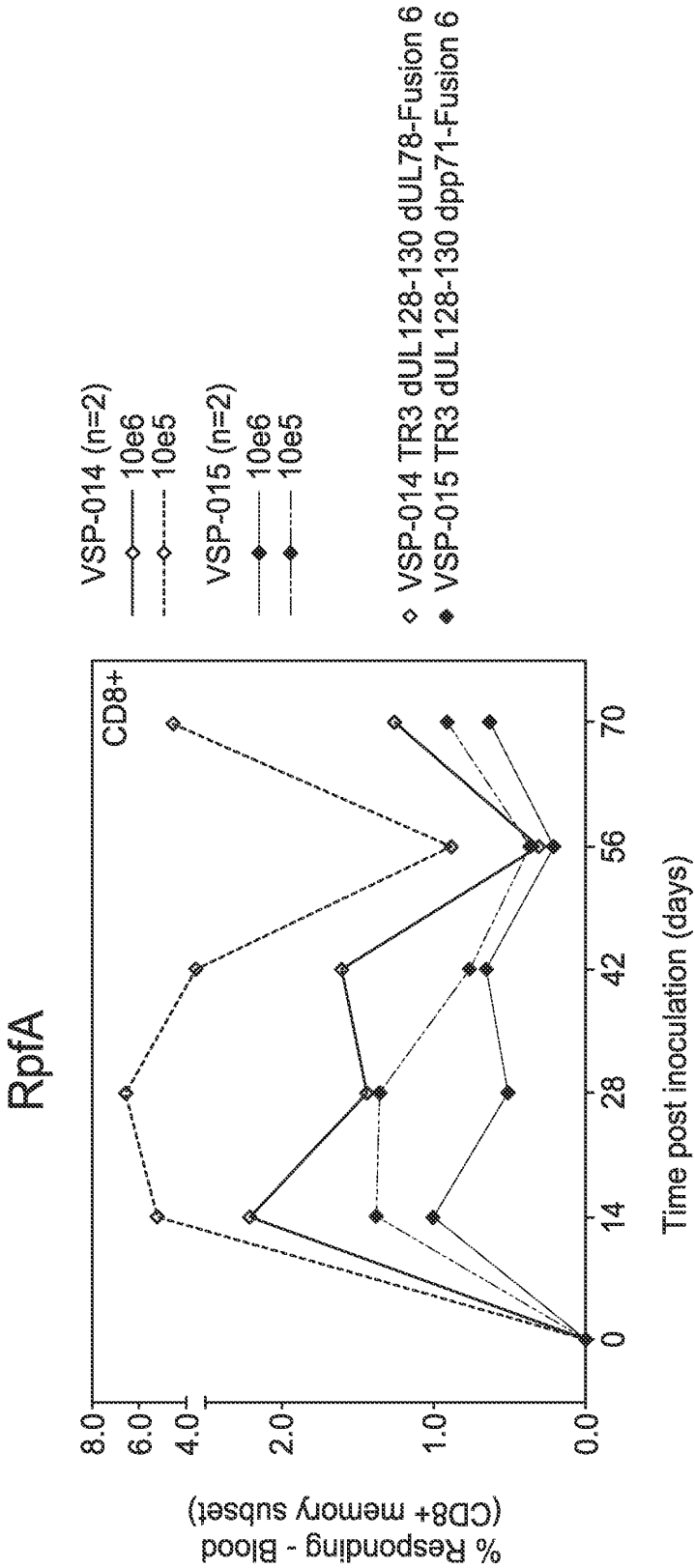


FIG. 6F

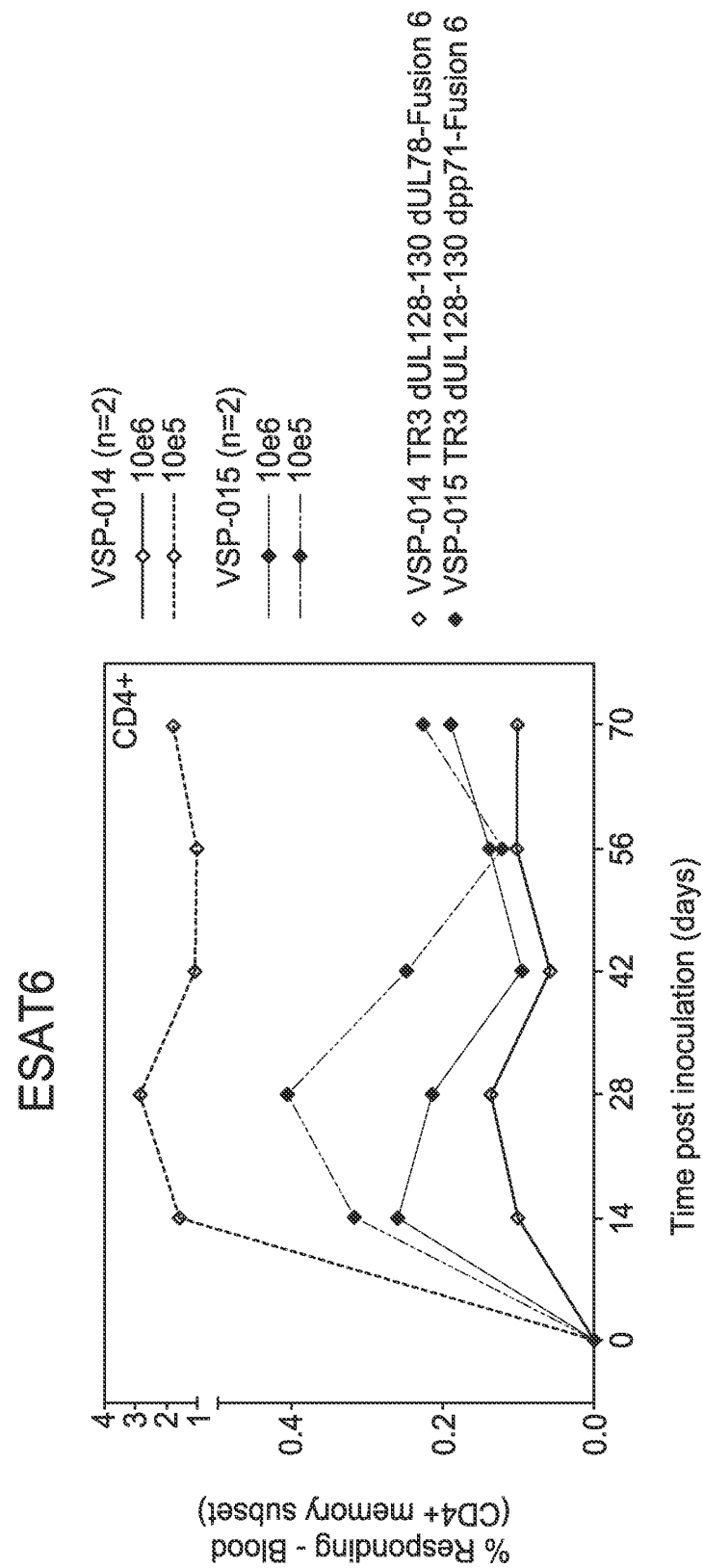


FIG. 6G

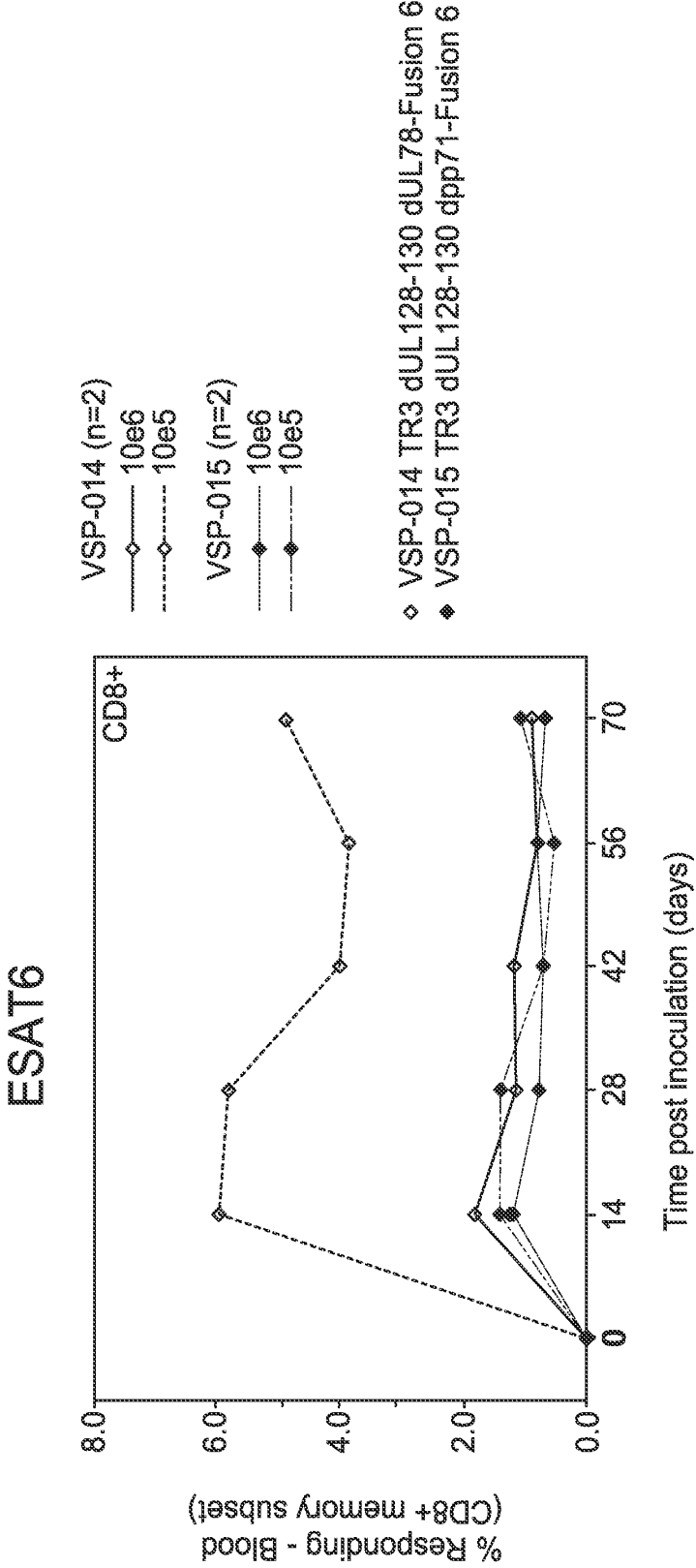


FIG. 6H

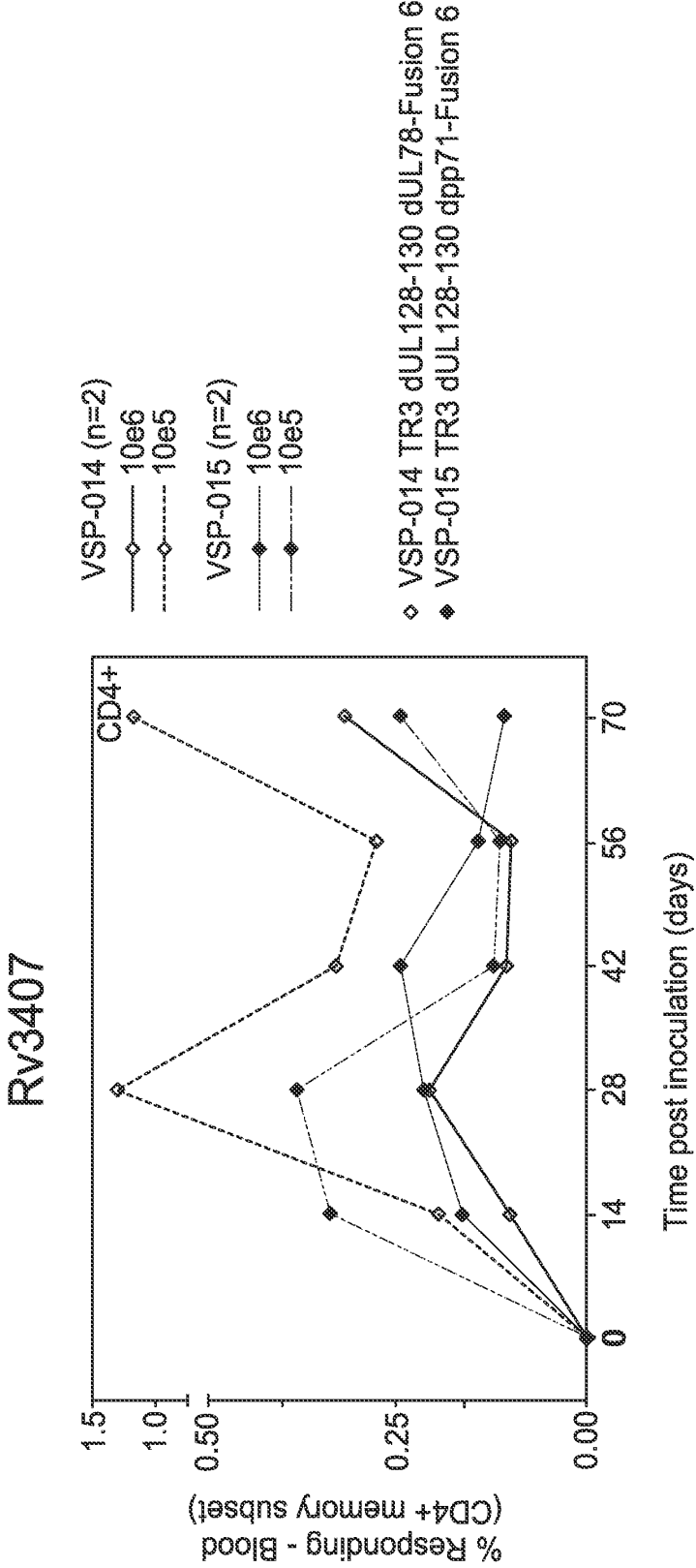


FIG. 6I

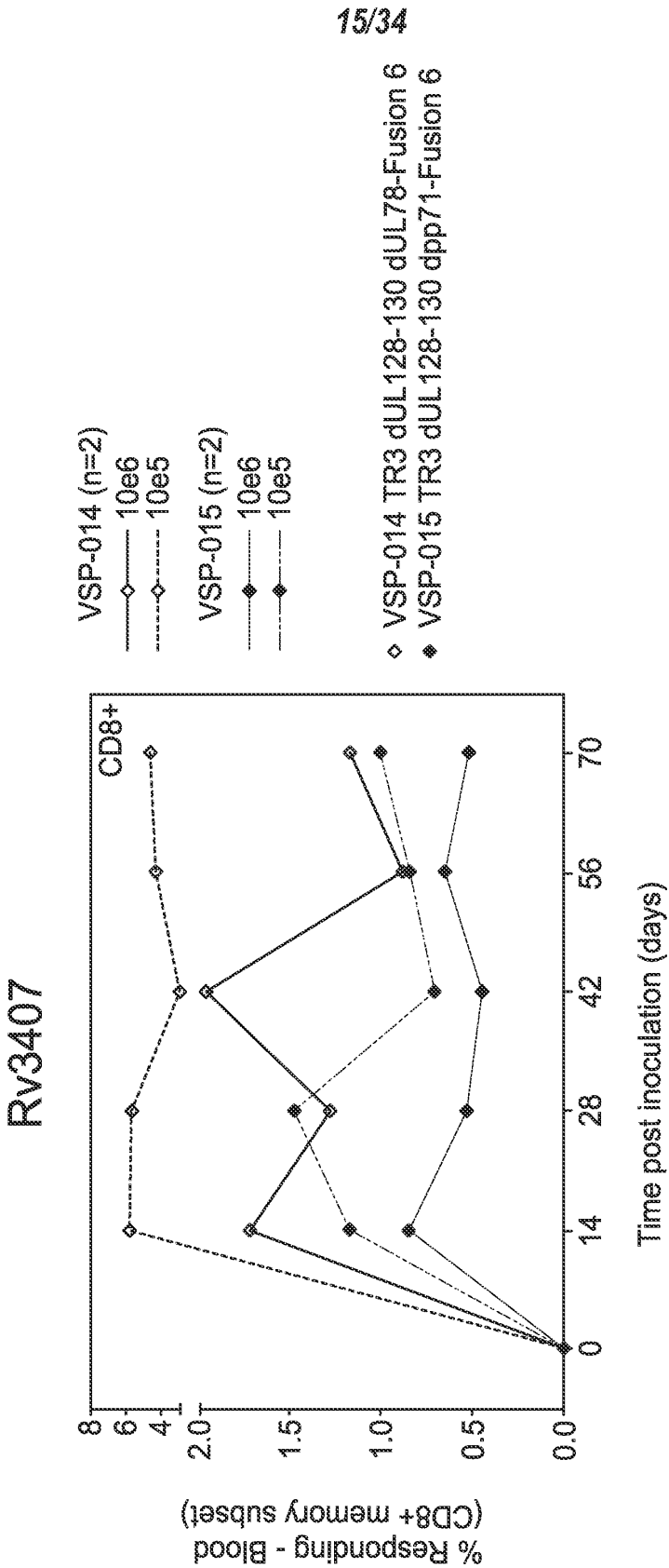


FIG. 6J

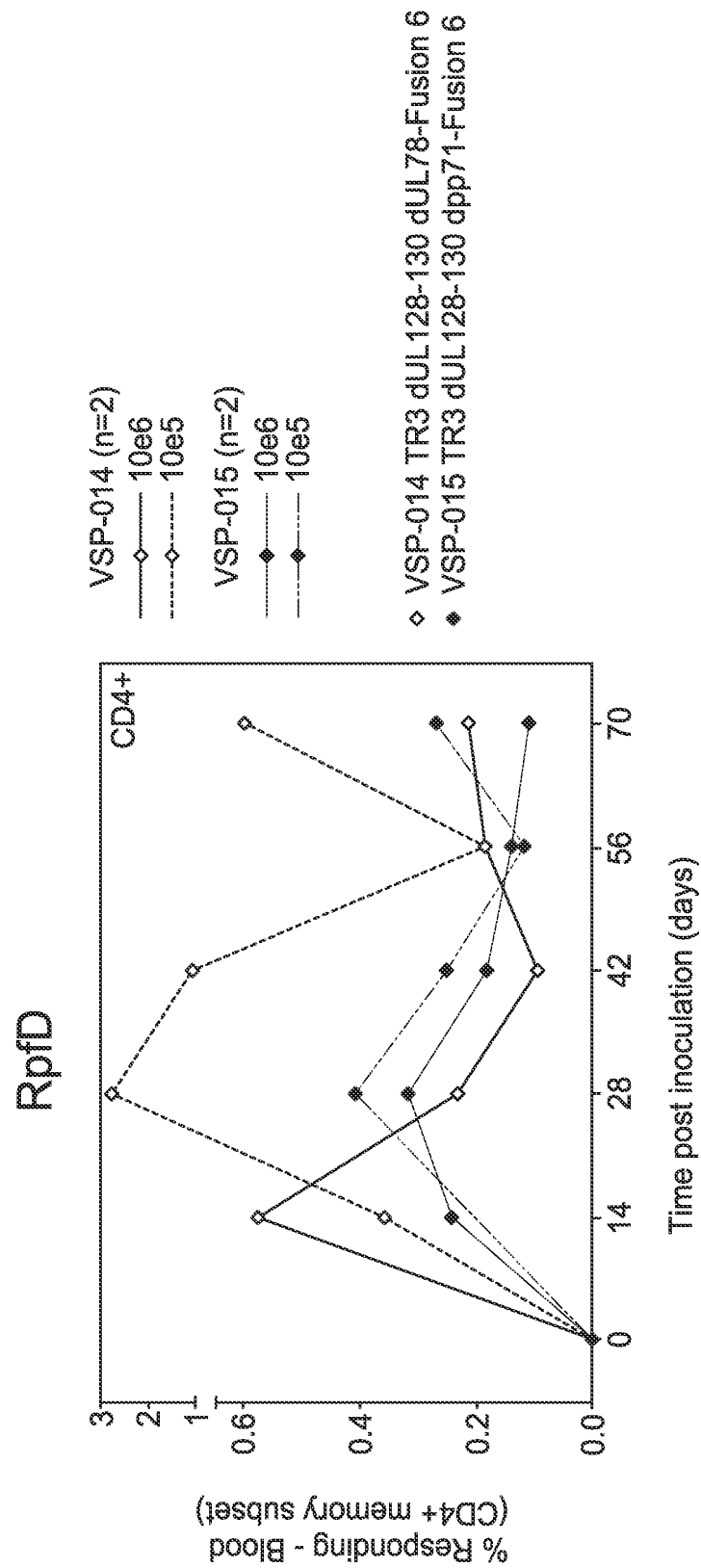


FIG. 6K

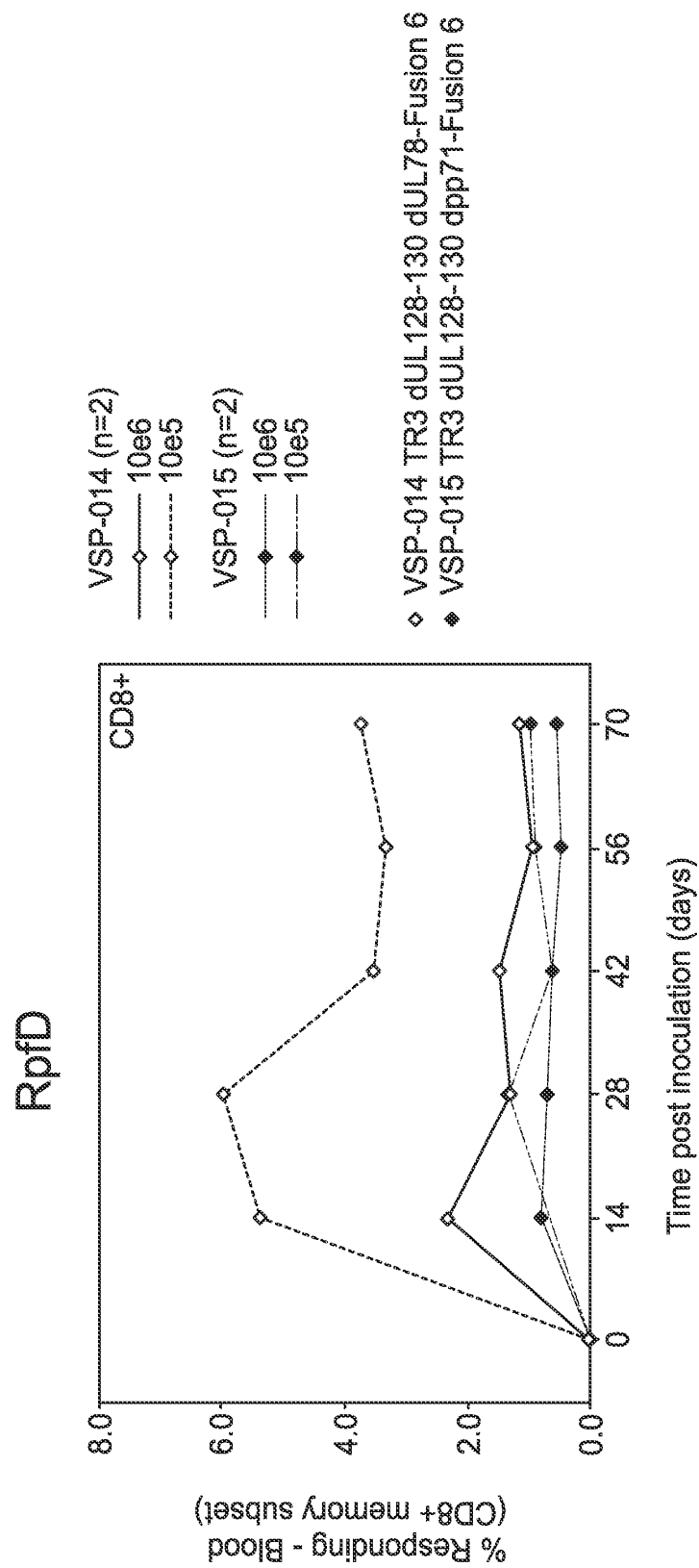


FIG. 6L

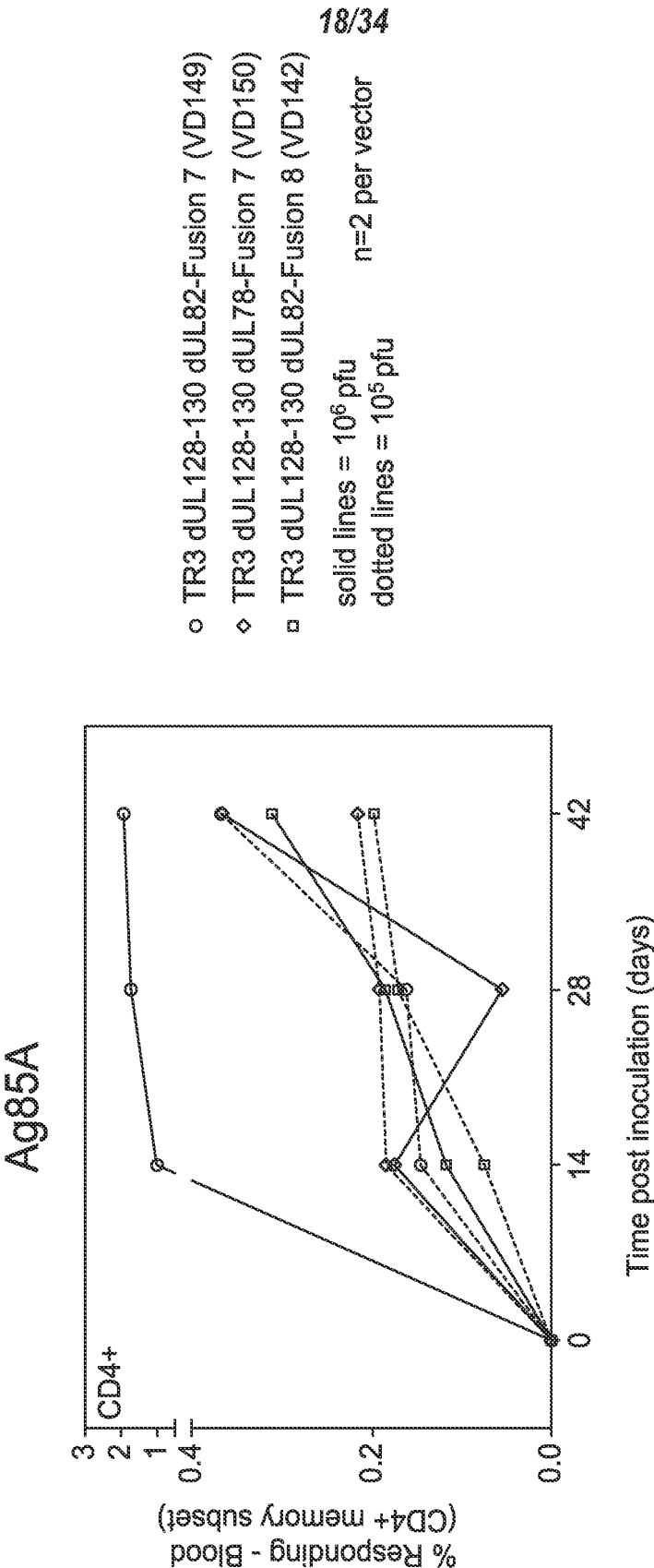


FIG. 7A

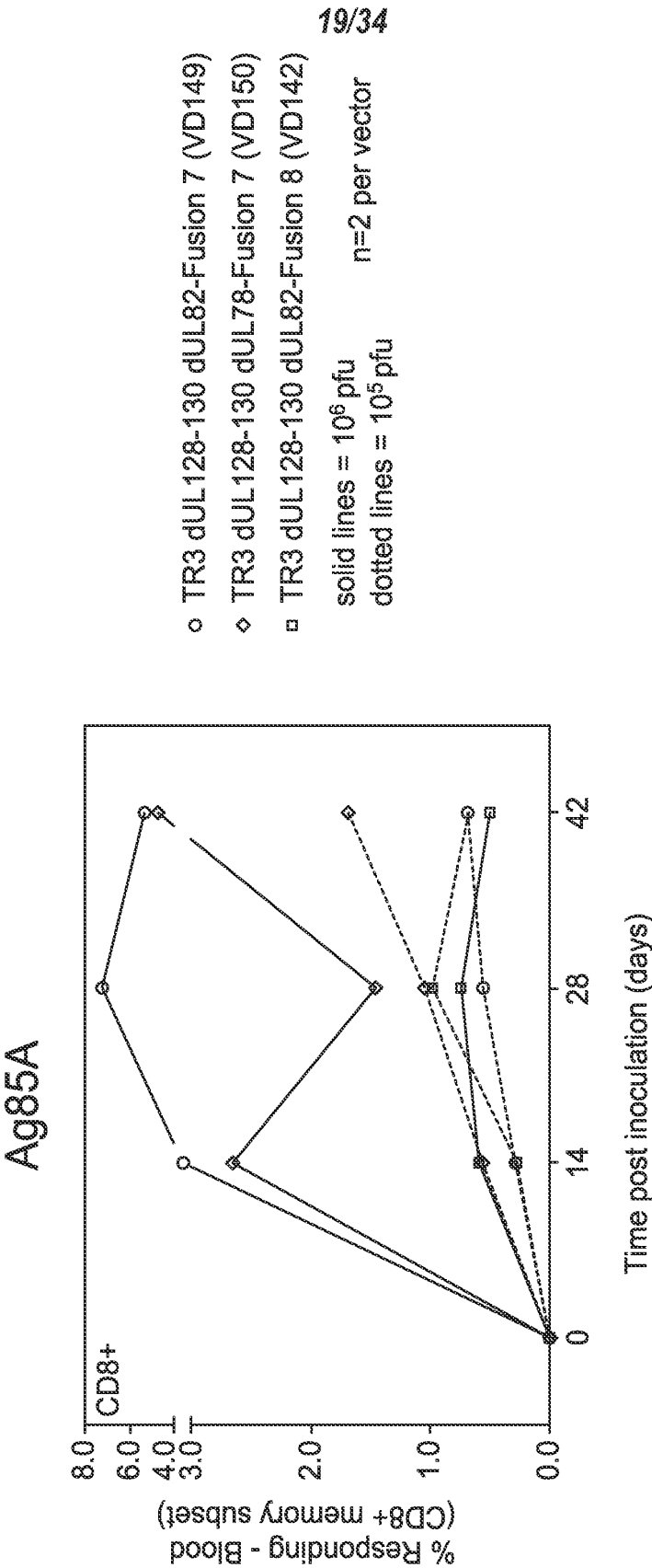


FIG. 7B

20/34

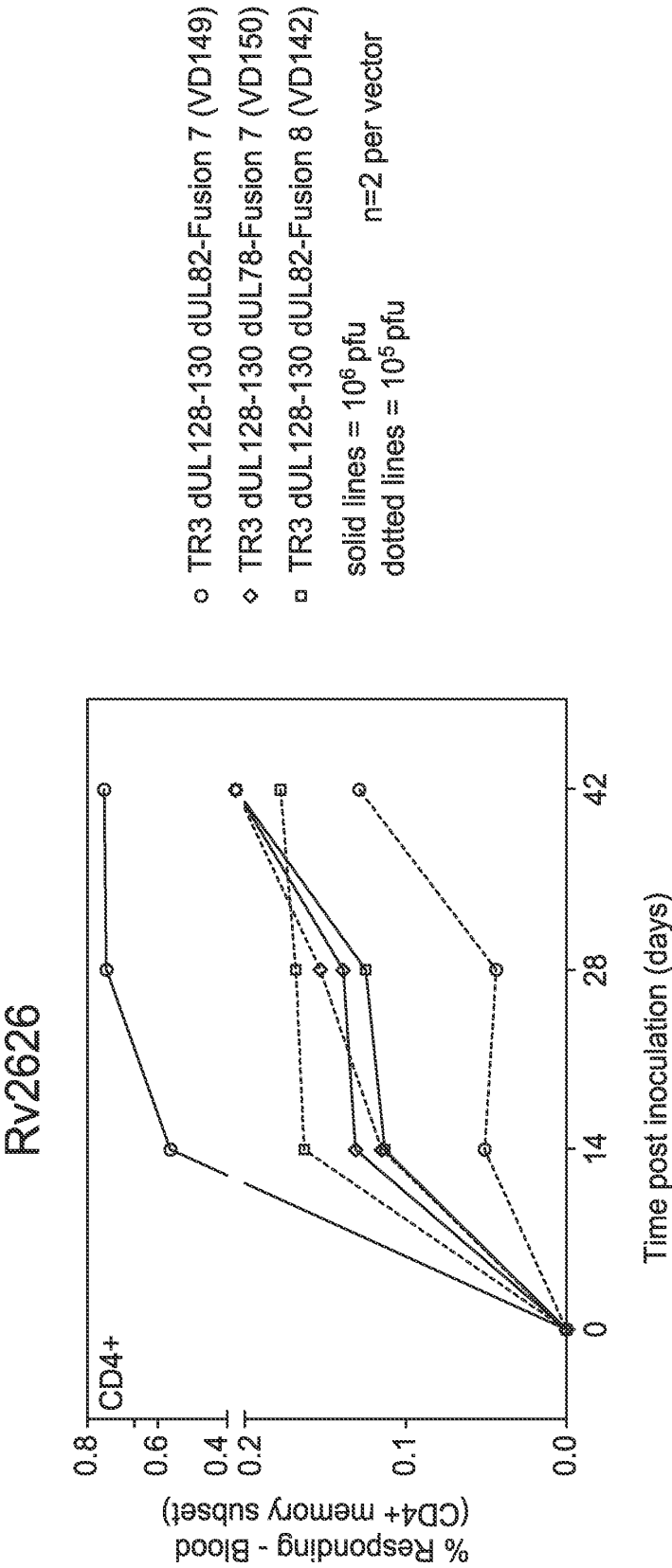


FIG. 7C

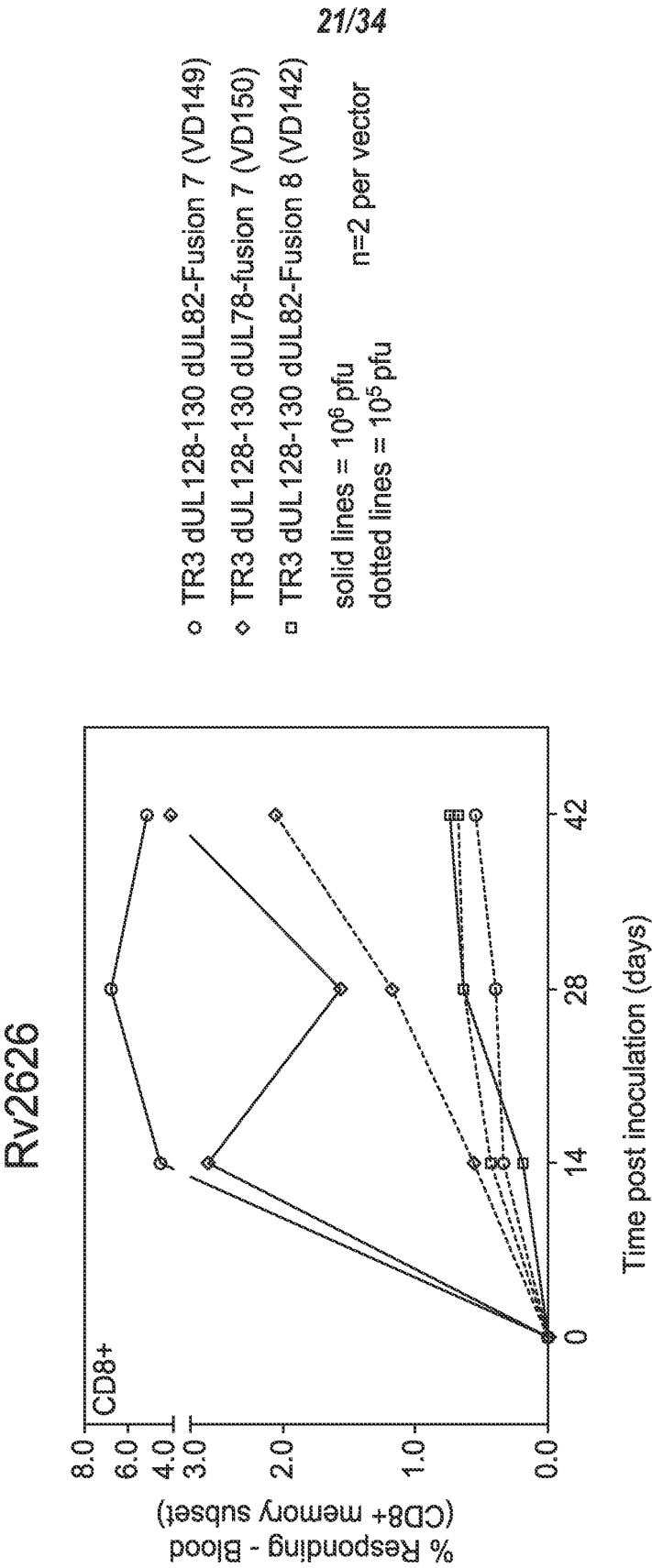


FIG. 7D

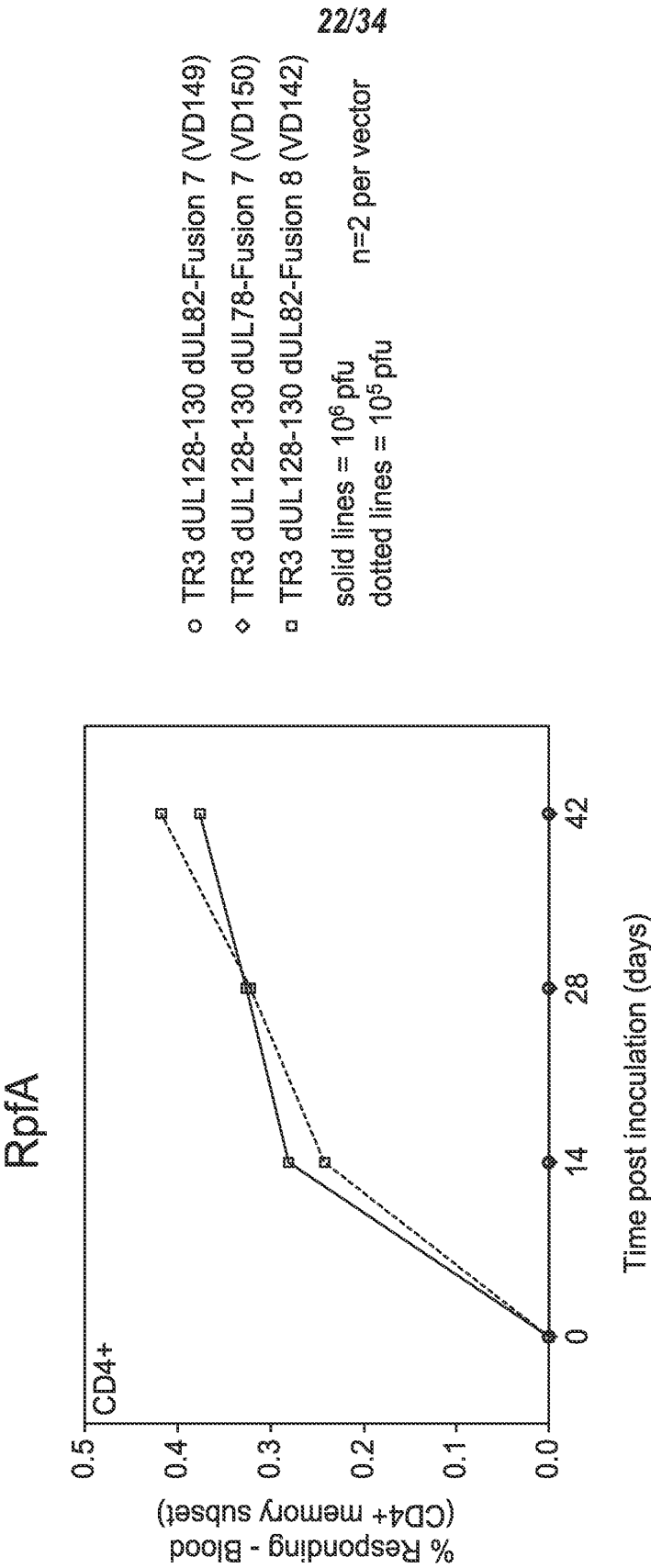


FIG. 7E

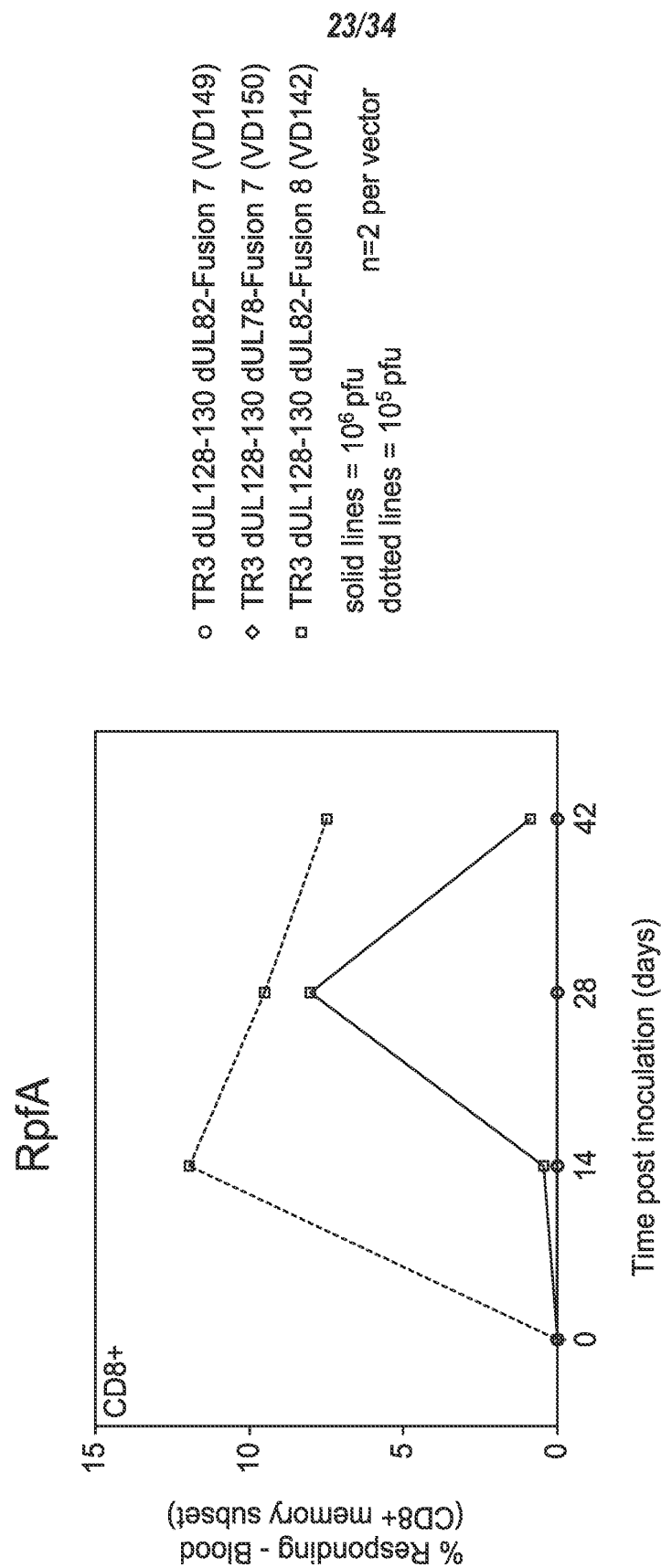


FIG. 7F

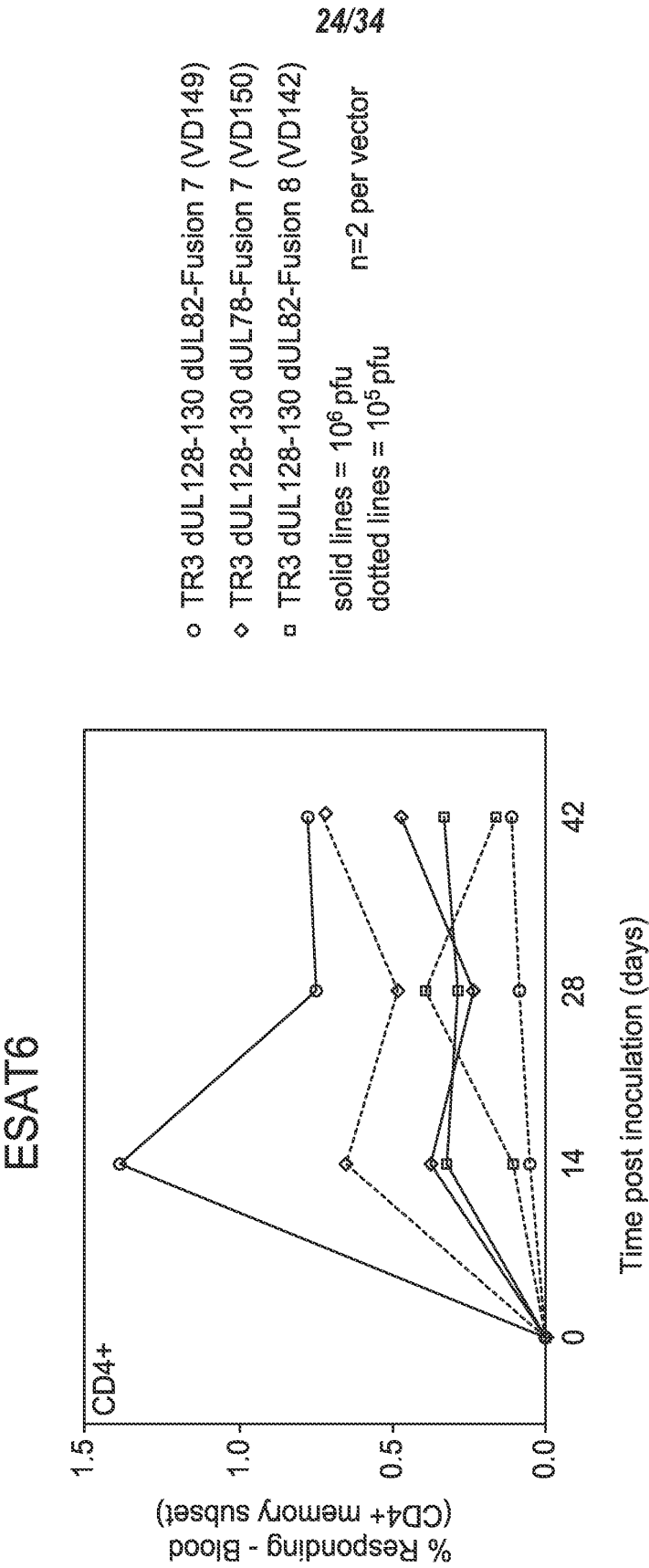


FIG. 7G

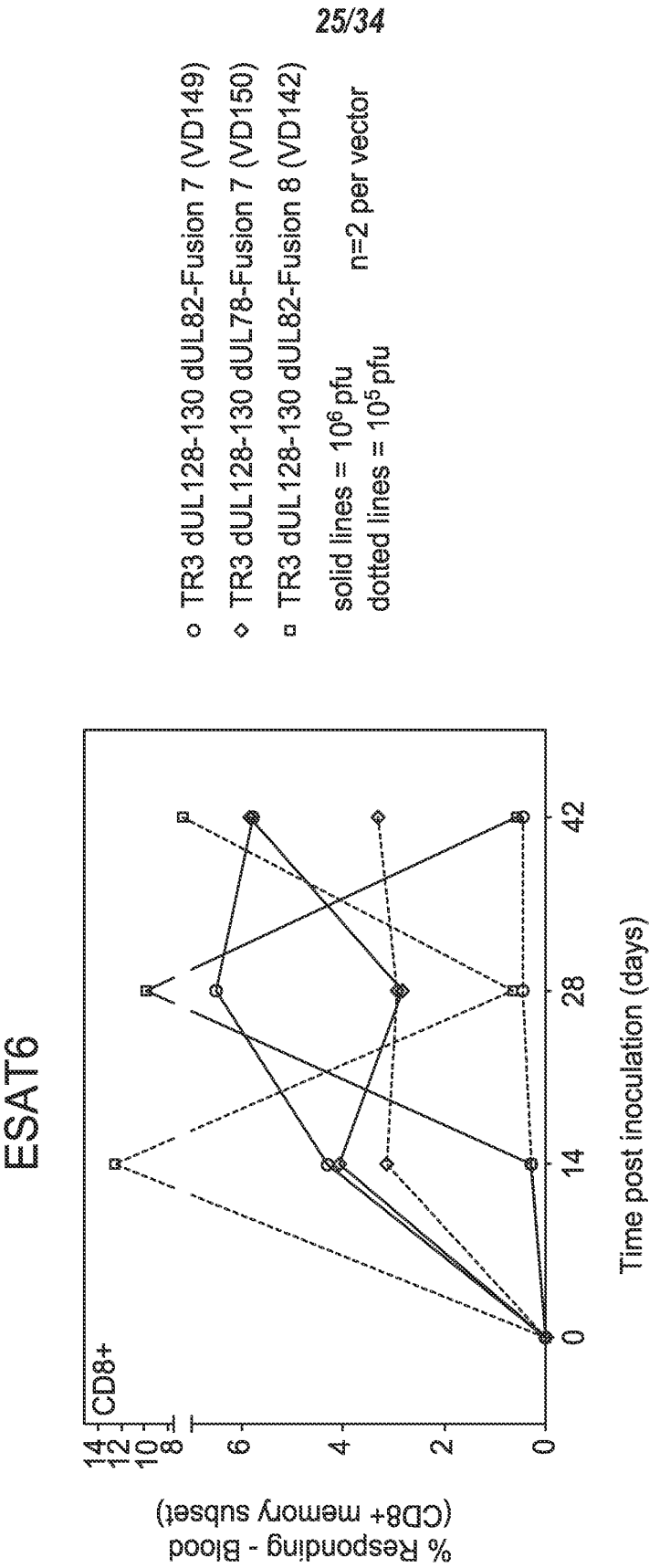


FIG. 7H

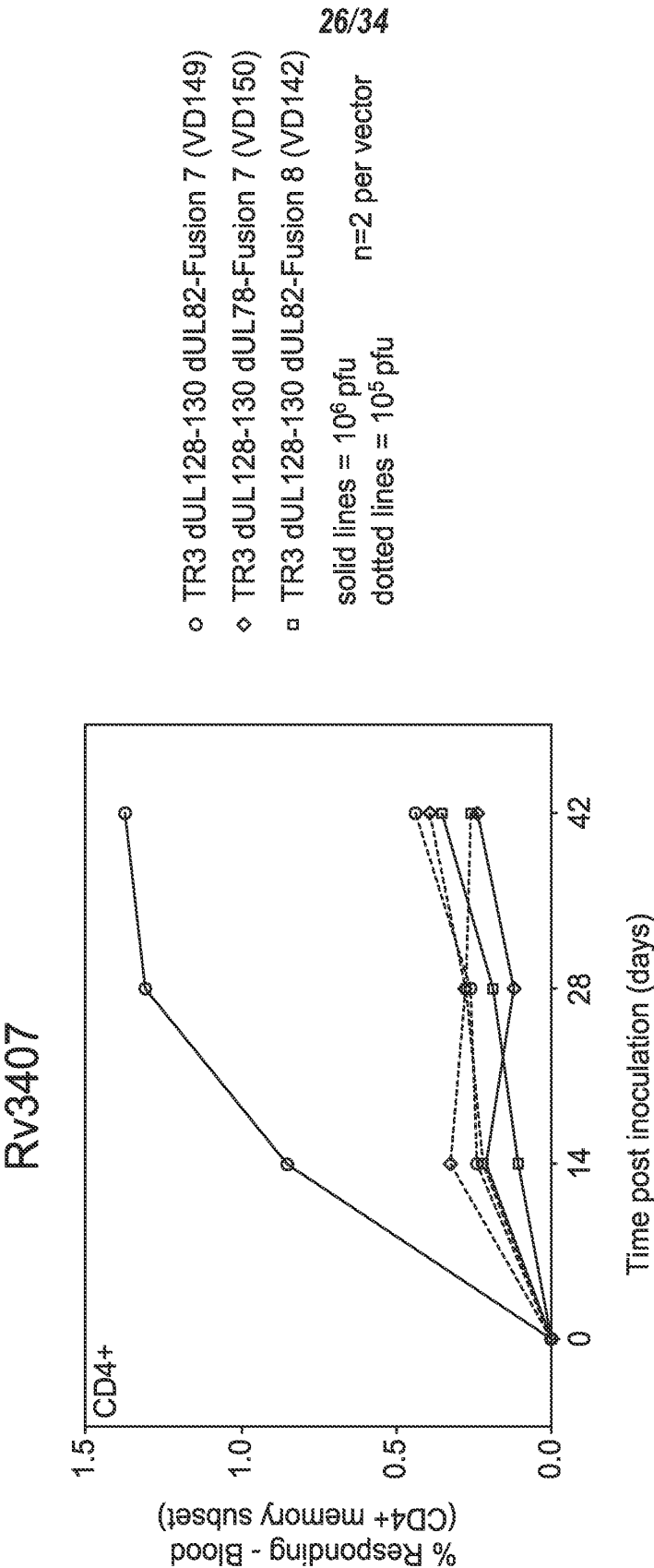


FIG. 71

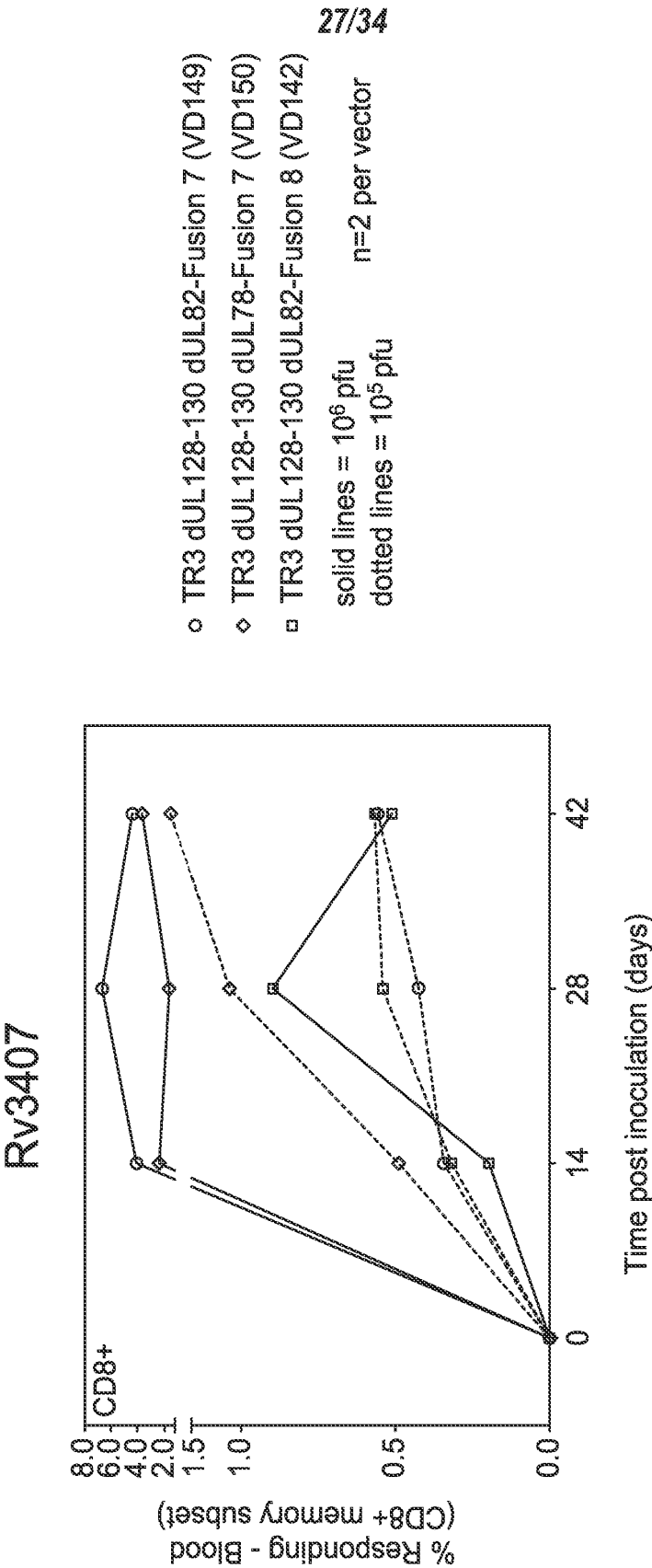


FIG. 7J

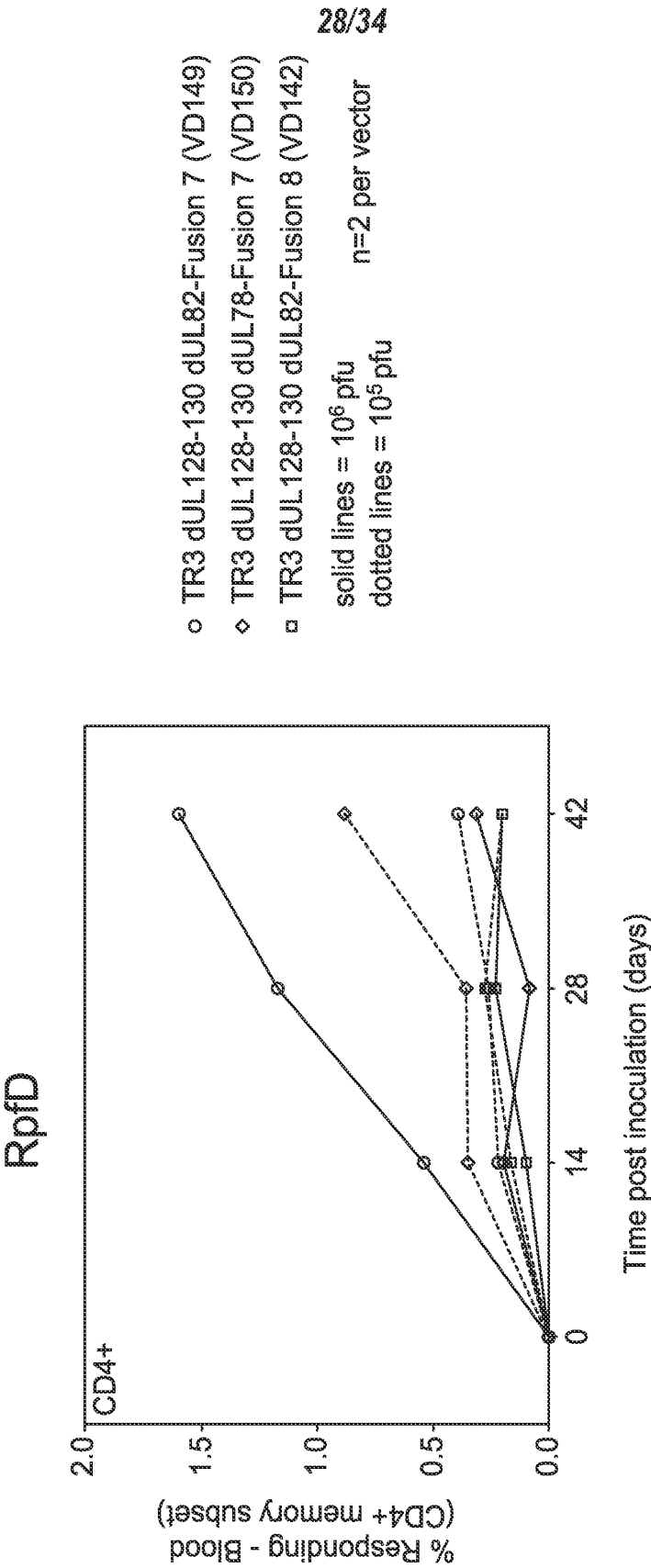


FIG. 7K

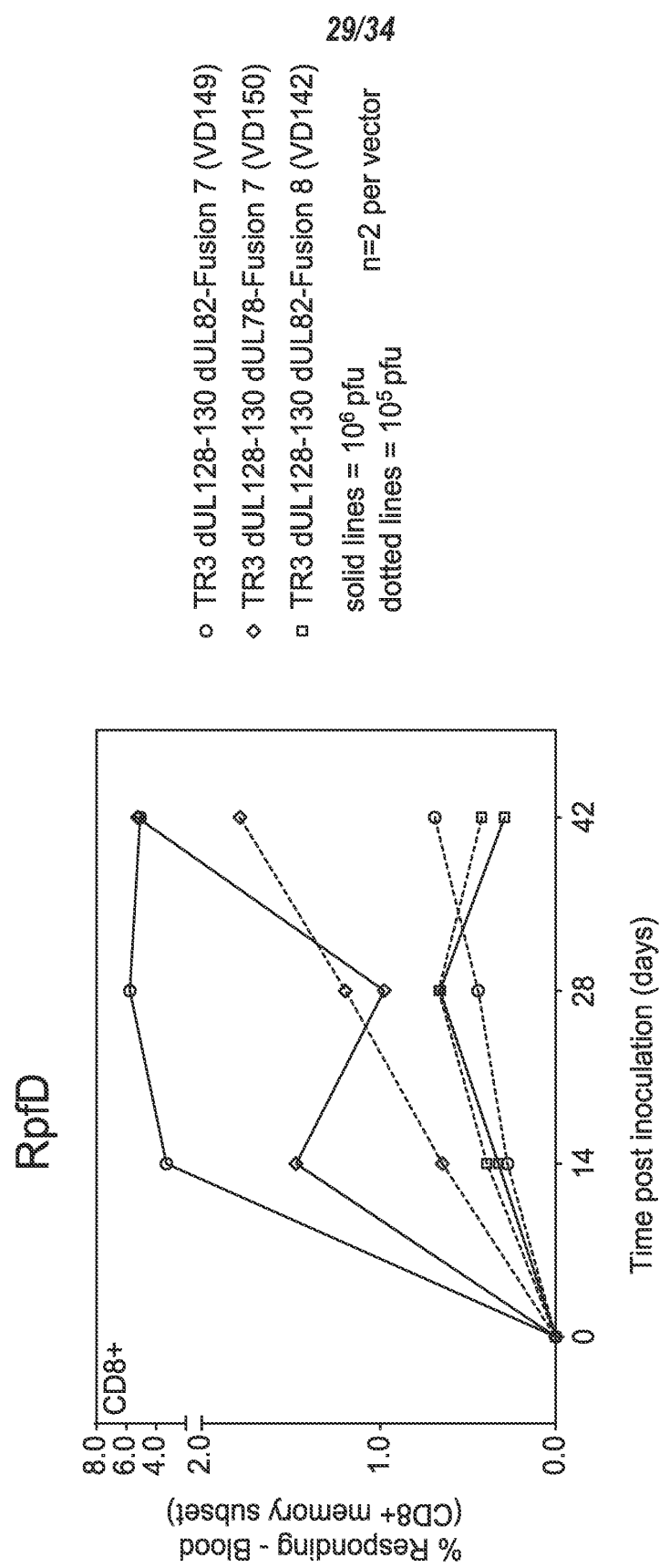


FIG. 7L

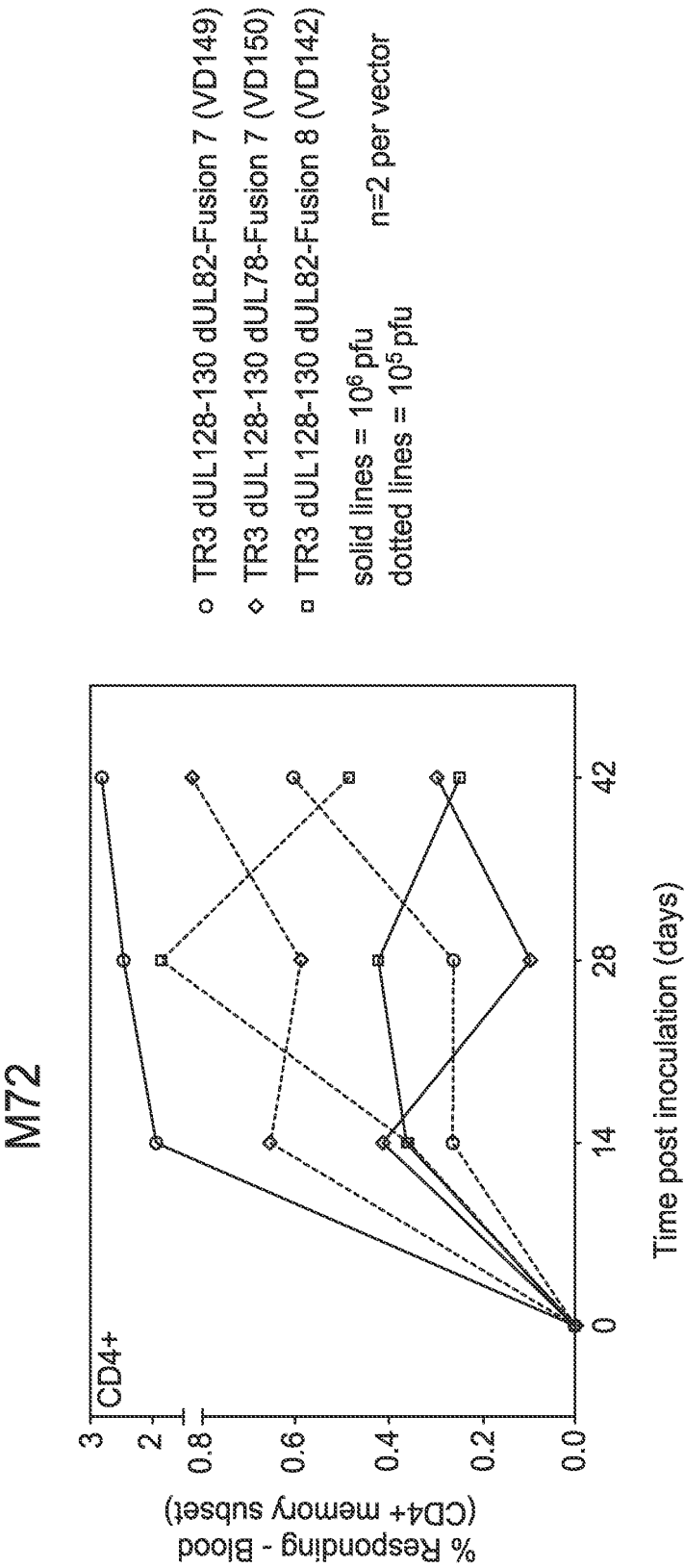


FIG. 7M

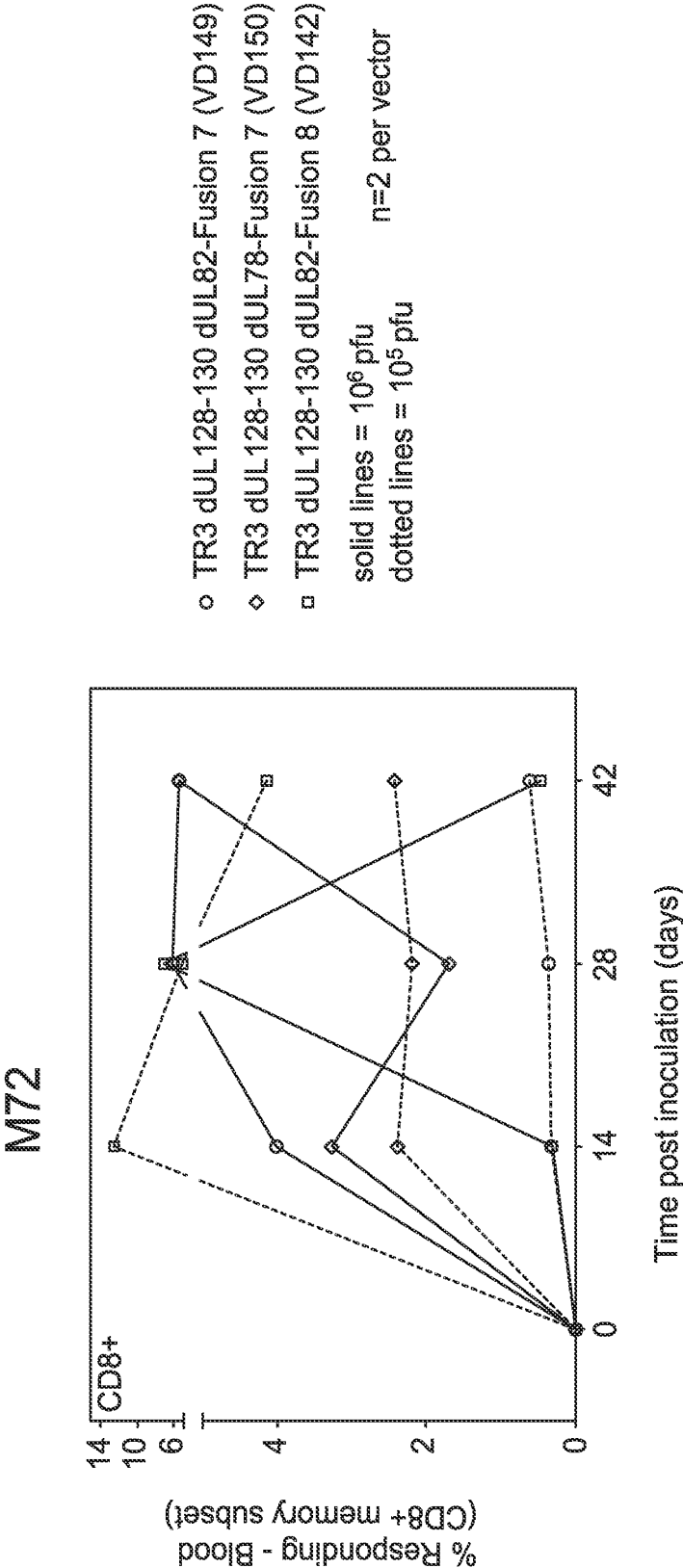


FIG. 7N

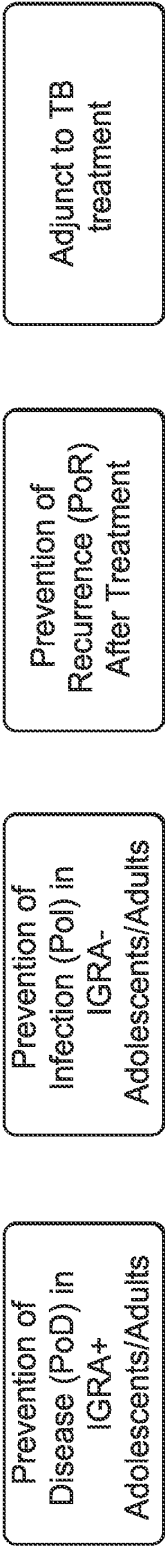


FIG. 8

Phase 1 N=10-100's	Indication	Phase 2 N=1000's	Phase 3 N=1,000's to 10,000's
CMV+ or CMV- BCG-/ IGRA- (USA)	Prevention of pulmonary TB adolescents/ adults	Phase 2 - Population: HIV-, Mtb infected (IGRA+) adults without evidence of active TB - Endpoints: Immunogenicity and reduction in incidence of active pulmonary TB (culture or Xpert-confirmed)	Definitive PoD study in endemic regions
CMV+/BCG+/ IGRA+ OR IGRA- (endemic)			
Adolescents (endemic)			
HIV+ on ART (endemic)			
Vaccine interference			

FIG. 9

Phase 1 N=10-100's	Indication	Phase 2a N=1000's	Phase 3 N=1,000's to 10,000's
CMV+ or CMV- BCG-/ IGRA- (USA)	Prevention of infection (Pol)	Phase 2a • HIV-, BCG+, IGRA- high risk adults • IGRA conversion	Definitive Pol study in high incidence population
CMV+/BCG+/ IGRA+ OR IGRA- (endemic)			
Adolescents (endemic)	Prevention of relapse (PoR)	Phase 2a • Immunogenicity/dose finding at end of treatment	Definitive PoR study in endemic region
HIV+ on ART (endemic)		Phase 2b • Immunogenicity/ reduction in recurrence	
Vaccine interference			

FIG. 10