

NeutNet Phase 1 Analysis of Collaborative Study

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Phase 1 Collaborative Study

- 13 participants returned data.
 - 3 returned data from 2 different assay systems.
- 16 data sets in total.
- Participants returned mixture of calculated IC50 or IC90, raw assay data, or both.
- Not all participants were able to test all viruses.
- All participants referred to by a random code number.

Phase 1 Collaborative Study

NeutNet Laboratory Codes			
Participant	Institute	Lab Code	Assay Type
Christian Jassoy	University Leipzig	1	Pseudovirus plasmids-3T3.T4 coreceptor transfected cells
David Montefiori	Duke University	2	Pseudovirus plasmids-TZM-bl
Paolo Lusso	FCSR	3A	Fusion Assay isolates PM1
Gabriella Scarlatti	FCSR	3B	ec P24 Reduction Isolates-PBMC
Terri Wrin	Monogram Biosciences	4A	Recombinant Virus - Cell Culture isolate-U87
Terri Wrin	Monogram Biosciences	4B	Recombinant Virus - DNA-plasmids-U87
Victori Polonis	Henry Jackson Foundation	5A	ec P24 reduction isolates -PBMC
Victori Polonis	Henry Jackson Foundation	5B	Pseudovirus plasmids-TZM-bl
Helen Donners	ITM Belgium	6A	Pseudovirus plasmid - Ghost
Helen Donners	ITM Belgium	6B	ec P24 Reduction isolate-PBMC
Hanneke Schuitemaker	Sanguin	7	ec P24 Reduction isolate-PBMC (Day 7 data only)
Christiane Moog	University Louis Pasteur	8	IC P24 isolate - PBMC
Eva Maria Fenyo	University Lund	9	Plaque Reduction - Isolate
Lynn Morris	NICD	10	Pseudovirus plasmids-TZM-bl
Ruengpung Sutthent	NHRBC	11	PCR isolate-PBMC
Jose Alcami	ISCI	12	Recombinant Virus from isolate but single clone-U87cells
			virus origin
			plasmids
			isolate
			isolate-recombinants

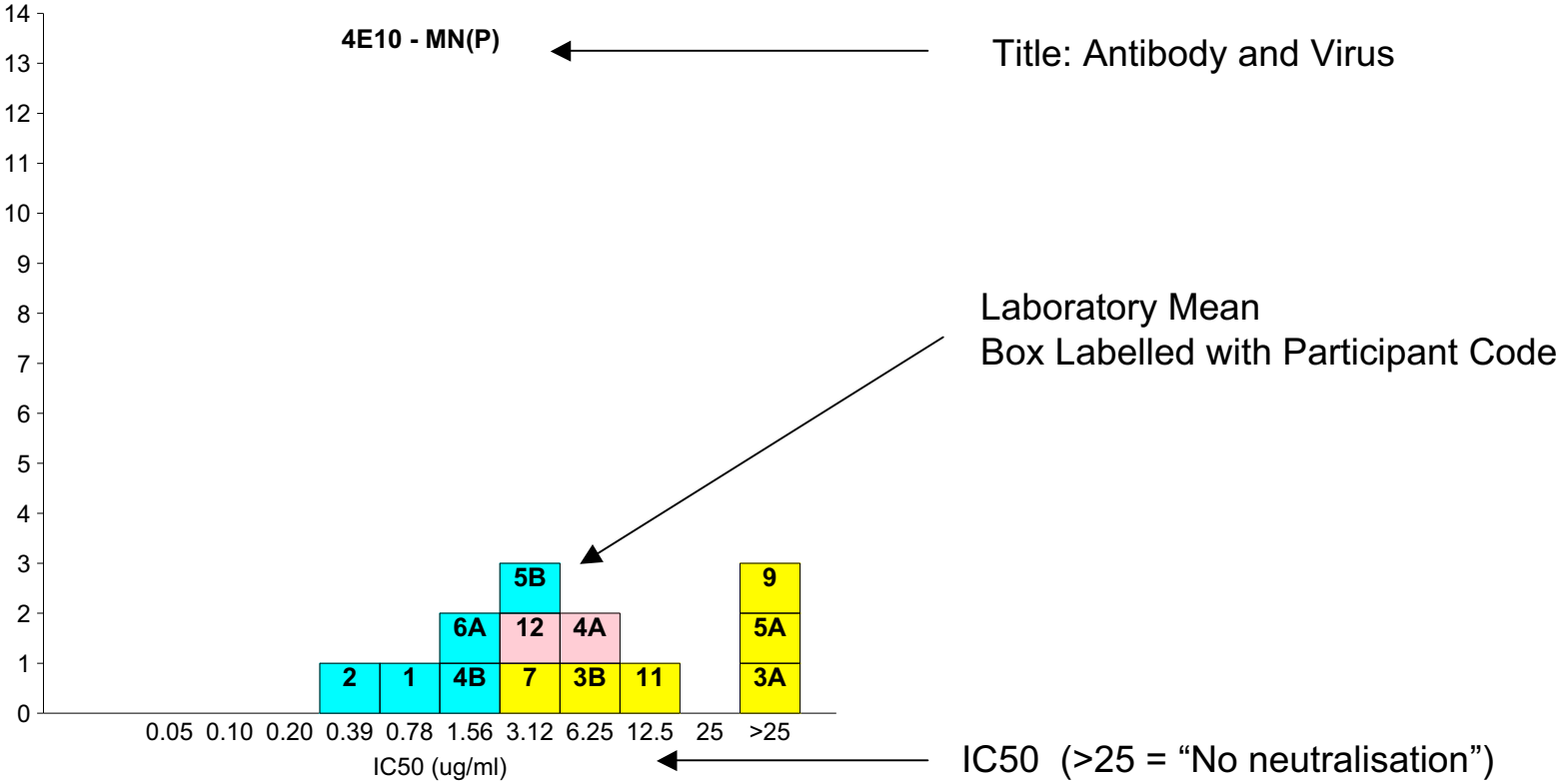
Phase 1 Collaborative Study

- Neutralisation Titre taken as IC50 (50% neutralisation compared to virus alone) for initial comparisons.
- Calculations provided by participants used where available.
- Where not provided, estimated from raw data.
- IC50s from replicate assays or runs combined as geometric means to give single figure for each virus/antibody combination.
- Not possible to obtain estimates from all data sets.

Phase 1 Collaborative Study

- Results are presented as Tables and Histograms:
- Tables comprise coloured blocks reflecting degree of neutralisation. Participants are grouped by assay type and source of virus. Viruses are grouped by subtype.
- Histograms show distribution of IC50 across individual laboratories, which are identified by their code number.

Example Histogram



Isolate
 Isolate-recombinant
 Plasmid
 ← Colour coded for virus type

Neutralisation with 4E10

		Plasmid						Culture Supernatant									
		Pseudovirus based assays						Virus infection assays									
Subtype	Virus	2	5B	10	6A	1	4B	12	4A	9	3B	6B	7	5A	8	11	3A
A	92RW009																
A	VI 191																
B	SF 162																
B	MN(P)																
B (US)	QH0692																
B (US)	AC10																
C	DU174																
C	92BR025																
D	92UG024																
E	CM244																
E	NP1525																
B (US)	CAAN5342																
X4 Viruses																	
			No Neutralisation (IC50 > 25)														
			Neutralisation (IC50 ≤ 25)														

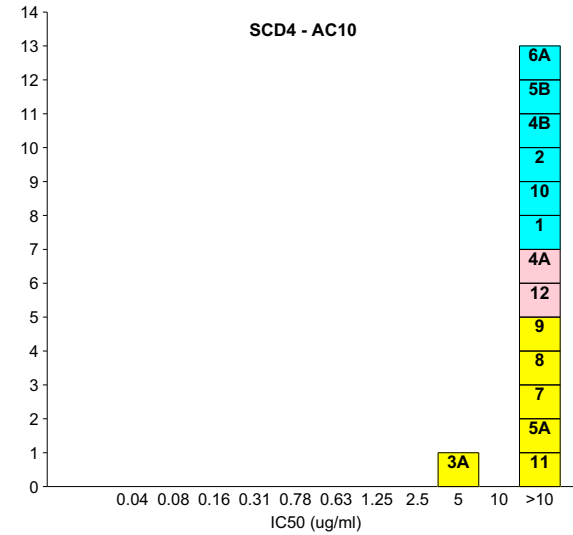
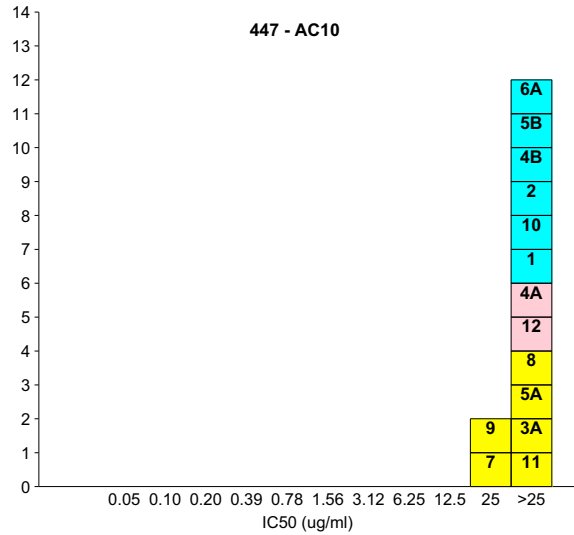
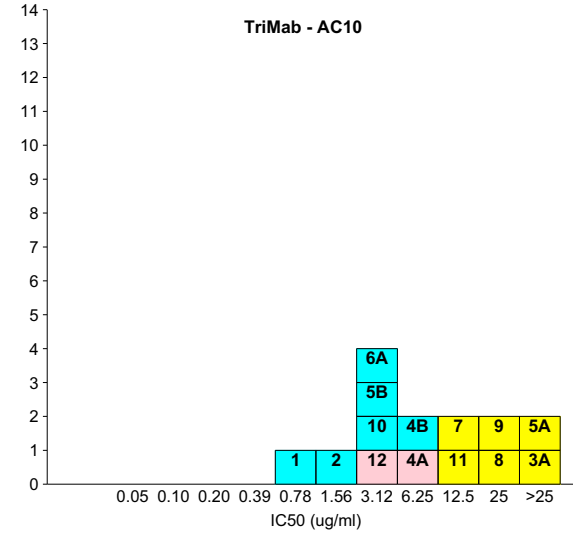
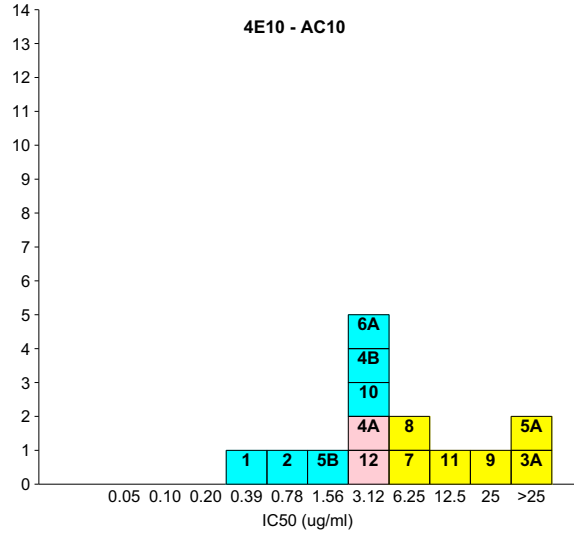
Neutralisation with TriMab

		Plasmid						Culture Supernatant									
		Pseudovirus based assays						Virus infection assays									
Subtype	Virus	2	5B	10	6A	1	4B	12	4A	9	3B	6B	7	5A	8	11	3A
A	92RW009			Green	Red	Green	Red	Red	Green	Green	Green	Red	Red	Green	Green	Green	Red
A	VI 191	Green	Green		Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
B	SF 162	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
B	MN(P)	Green	Green		Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		Green	Green
B (US)	QH0692	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Red
B (US)	AC10	Green	Green	Green	Green	Green	Green	Green	Green	Green			Green	Red	Green	Green	Red
C	DU174	Green	Green	Green	Green	Green	Green		Green	Red	Green	Green	Green	Green	Green	Green	
C	92BR025	Green		Green	Green	Green	Green	Green	Green	Red				Red	Green	Green	Red
D	92UG024	Green			Green	Green	Green	Green	Green	Green			Green	Green	Green	Green	Green
E	CM244	Green	Green		Green	Green	Green		Green	Green	Red	Red	Green	Green	Green	Red	Red
E	NP1525							Green	Green	Green	Red		Green	Green		Green	Red
B (US)	CAAN5342	Green	Red	Green	Red		Red										
X4 Viruses																	
		Red	No Neutralisation (IC50 > 25)														
		Green	Neutralisation (IC50 <= 25)														

Neutralisation with sCD4

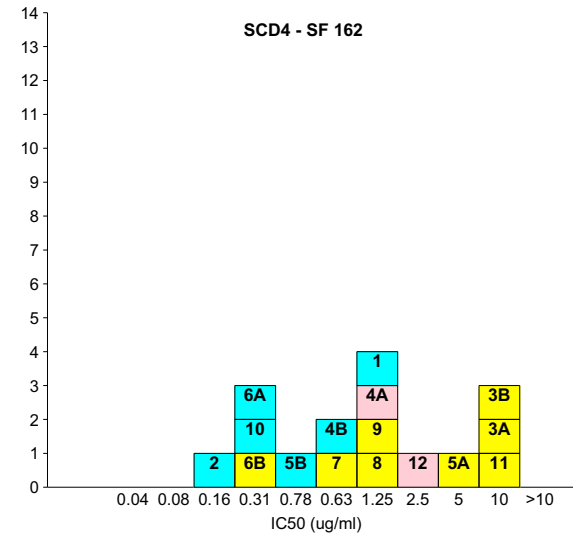
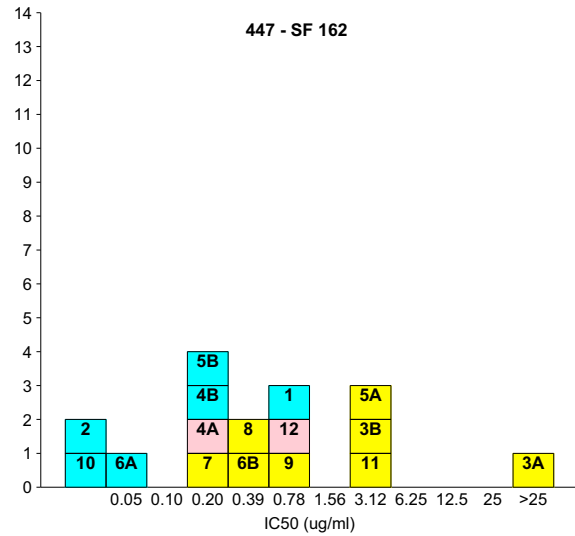
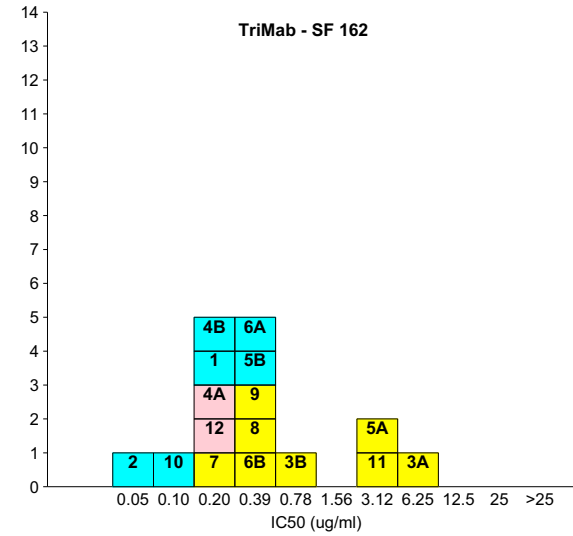
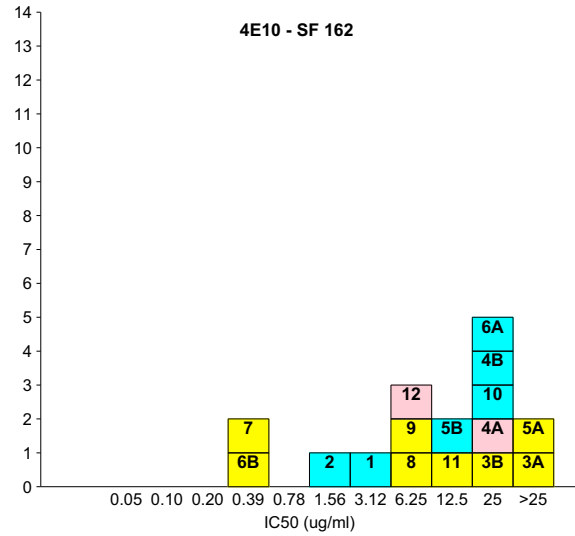
		Plasmid						Culture Supernatant										
		Pseudovirus based assays						Virus infection assays										
Subtype	Virus	2	5B	10	6A	1	4B	12	4A	9	3B	6B	7	5A	8	11	3A	
A	92RW009			Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green	Red	
A	VI 191	Red	Red		Red	Green	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	
B	SF 162	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	
B	MN(P)	Green	Green		Green	Green	Green	Green	Green	Green	Red	Green	Green	Red		Green	Green	
B (US)	QH0692	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Red	Red	Red	Red	Red	
B (US)	AC10	Red	Red	Red	Red	Red	Red	Red	Red	Red			Red	Red	Red	Red	Green	
C	DU174	Green	Green	Green	Green	Green	Green		Red	Red	Red	Red	Red	Red	Red	Red		
C	92BR025	Green		Green	Green	Green	Green	Green	Green	Red		Green		Red	Red	Green	Red	
D	92UG024	Green			Green	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Green	
E	CM244	Red	Green		Red	Red			Green	Green	Red		Red	Red	Red	Red	Green	
E	NP1525							Green	Green	Green	Red		Green	Red		Red	Red	
B (US)	CAAN5342	Red	Red	Red	Red		Red											
	X4 Viruses																	
		Red	No Neutralisation (IC50 > 10)															
		Green	Neutralisation (IC50 <= 10)															

Virus AC10



Isolate
 Isolate-recombinant
 Plasmid

Virus SF 162



Isolate
 Isolate-recombinant
 Plasmid

