

Conclusions of NeutNet Phase I

1. Good agreement between pseudovirus (PSV) assays
2. Good agreement between PBMC assays
3. PSV assays more sensitive than PBMC assays
4. Variation was dependent on both the reagents (AB & sCD4) and the virus
5. PSV assay can measure IC50; PBMC assay requires $>IC_{50}$ for precise measurements

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)															

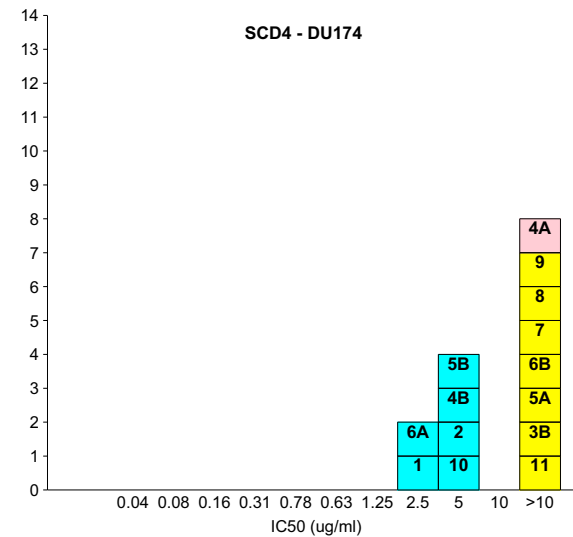
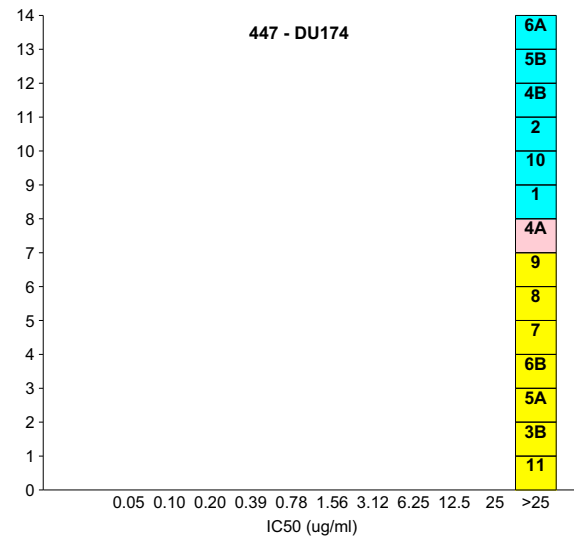
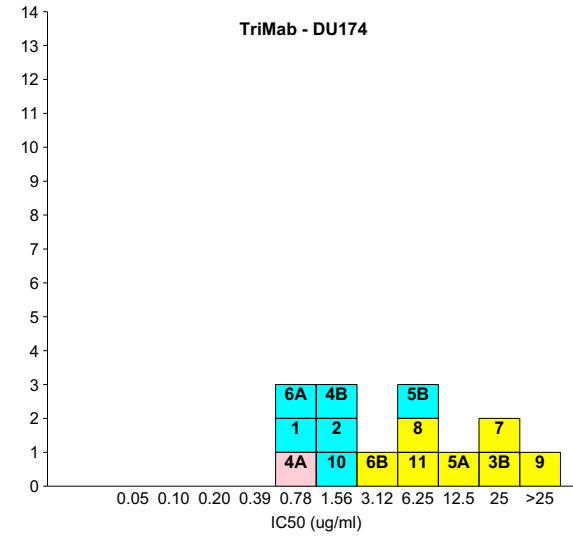
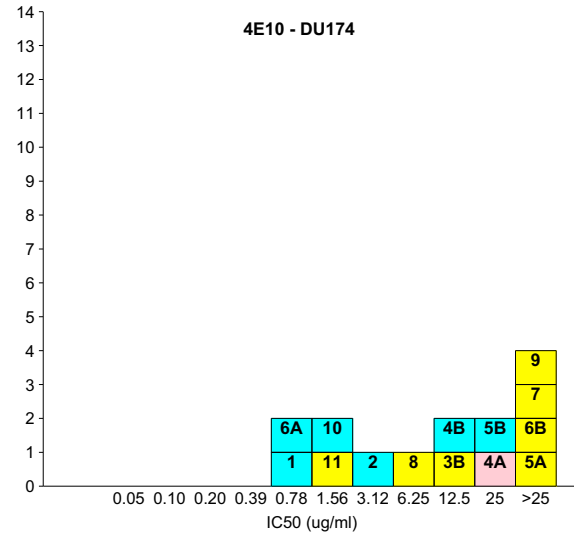
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1. Good agreement between pseudovirus (PSV) assays
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4. Variation was dependent on both the reagents (AB & sCD4) and the virus
5. PSV assay can measure IC50; PBMC assay requires $>IC_{50}$ for precise measurements

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 DU174

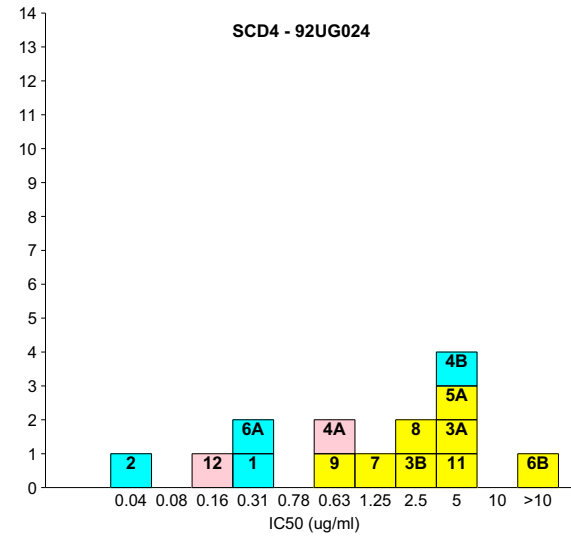
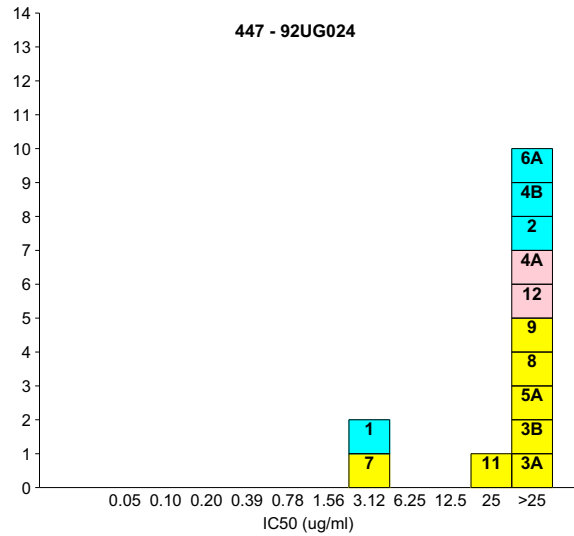
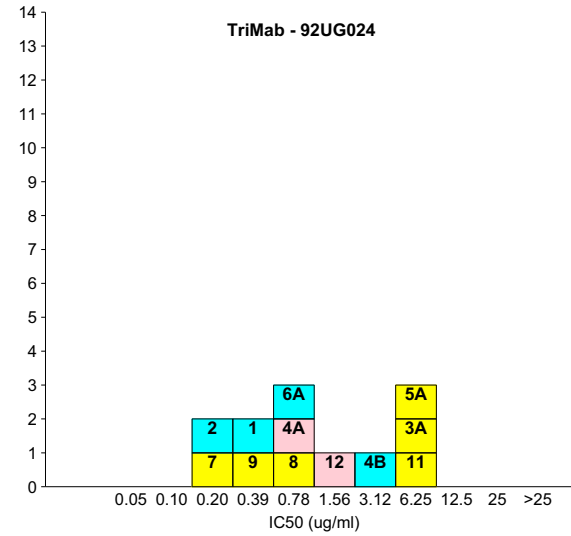
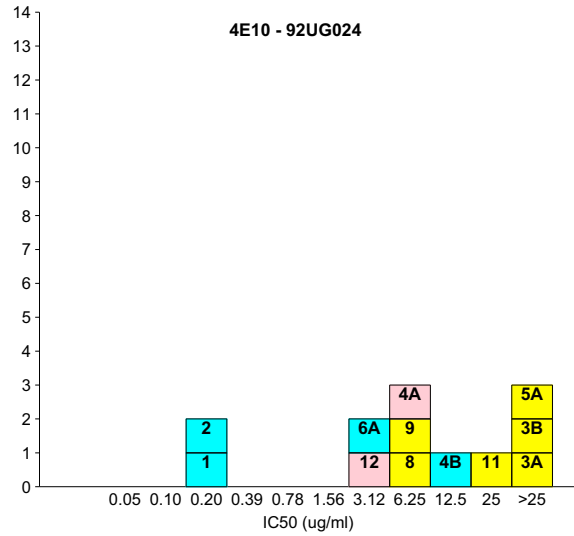


Isolate
 Isolate-recombinant
 Plasmid

Conclusions of NeutNet Phase I

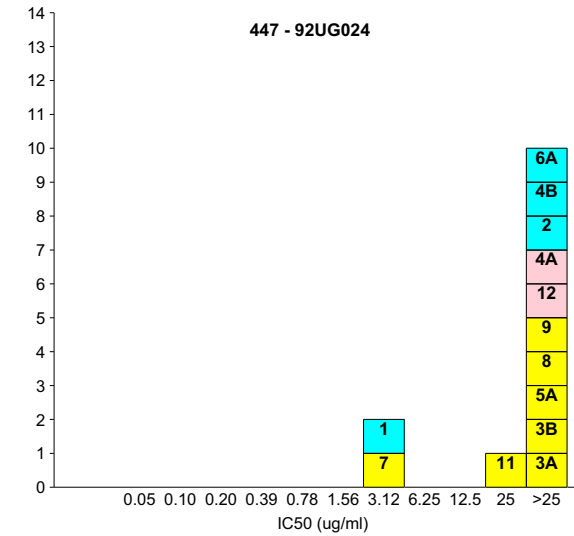
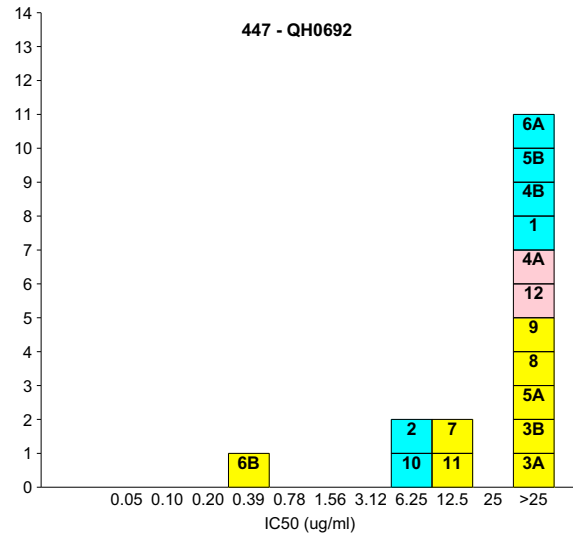
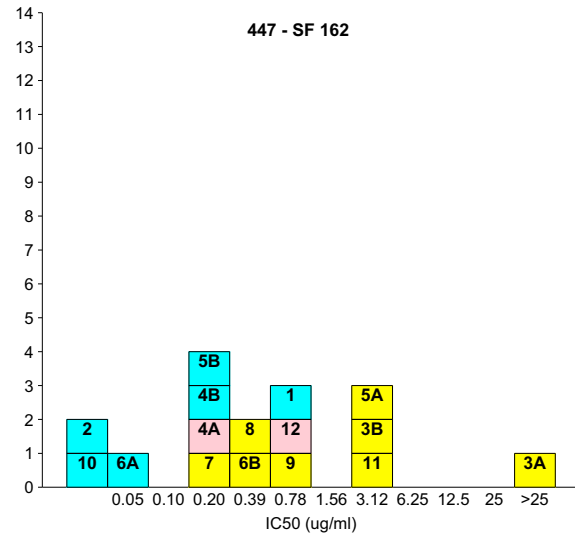
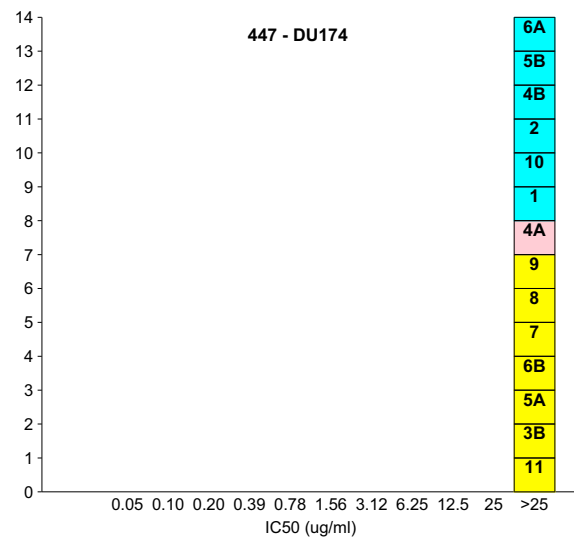
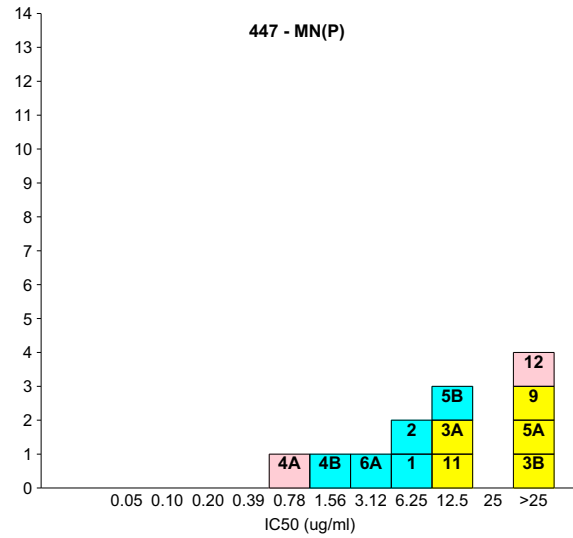
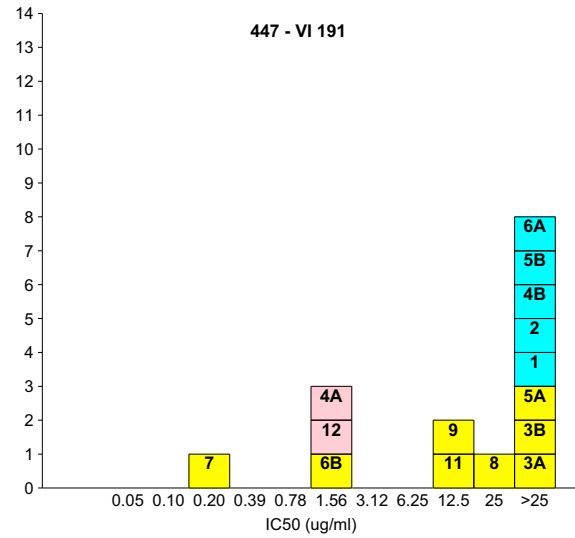
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Virus 92UG024



Isolate
 Isolate-recombinant
 Plasmid

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Isolate
 Isolate-recombinant
 Plasmid

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Conclusions of NeutNet

Phase I cont'd

6. Since we don't know which *in vitro* assay correlates to biological protection (*in vivo*) we need to use a panel of neutralization assays, including:
 - PSV & recombinant virus assays
 - PBMC assay
 - Macrophages
 - Plaque assays
 - Cell-cell fusion assay