

chloroquine have been expressed as nanomoles per milliliter, adjusting for the differing volumes of blood used in the two techniques. It is obvious that in the micro culture system, schizonts continued to be formed at higher concentrations of chloroquine than in the "macro" technique.

Successful short-term cultivation of *P. falciparum* using "micro" amounts of blood is significant for field evaluation of antimalarials susceptibility. The technique requires further work in our hands before it is as useful as the more established "macro" technique. The project will continue and will be expanded for the evaluation of other drugs.

REFERENCES :

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Figure 1. *In vitro* inhibition of schizogony by chloroquine
"MICRO" Technique

Case No.	Asexual Parasites per mm ³	Control (Schizonts per 200 parasites)	Inhibition of Schizont Development (p-mols chloroquine/well)								
			1	2	4	5	6	8	12	16	32
22	30016	118	20.3	84.7	74.7	69.4	82.2	72.0	72.8	56.7	21.1
23	7040	194	90.4	99.2	94.6	95.1	97.1	96.6	99.2	97.1	43.7
24	4350	127	66.6	84.7	75.2	40.0	90.9	78.4	43.9	19.6	5.4
25	3480	120	76.6	95.0	74.1	73.3	70.8	81.6	41.6	27.5	0
29	14950	196	98.4	0	64.7	96.9	77.5	82.1	75.5	67.8	21.4
45	8200	130	92.3	97.6	110.7	92.3	110.7	90.7	106.1	88.4	22.3
47	22446	73	100.0	90.4	84.0	34.2	39.7	57.5	38.3	26.0	0
50	3567	160	88.4	95.3	71.0	39.1	87.8	83.4	70.4	46.1	56.6
52	3219	168	87.5	88.6	89.8	75.0	90.4	88.6	82.1	37.5	89.7
54	7287	177	93.2	92.6	84.1	68.3	86.4	79.0	63.8	59.8	3.3
60	10440	29	98.3	108.4	84.7	64.4	84.7	67.7	47.4	37.2	37.2
61	2610	160	114.3	106.2	83.1	83.7	91.2	87.5	71.2	70.6	0
Mean	9800	138	85	87	83	69	84	81	68	53	25

"MACRO" Technique

Case No.	Asexual Parasites per mm ³	Control (Schizonts per 200 parasites)	Inhibition of Schizont Development (n-mols chloroquine/vial)							
			0.5	1	1.25	1.5	2	2.5	3	4
22	30016	61	92.6	73.1	100.8	55.2	47.1	37.3	29.2	4.8
23	7040	189	90.4	75.1	41.2	36.5	28.0	7.9	6.3	2.6
24	4350	166	92.4	43.8	18.0	4.2	1.8	0	0	0
25	3480	150	88.3	53.8	27.2	1.9	1.3	0.6	0	0
29	14950	152	81.5	53.9	37.5	19.0	25.6	0.6	0.6	0
45	8200	123	83.4	42.1	33.1	15.3	4.8	0.8	0	0
47	22446	28	42.8	10.7	3.5	10.7	3.5	0	0	0
50	3567	47	98.9	67.3	58.9	31.5	25.2	29.4	4.2	77.8
52	3219	108	63.8	38.8	32.4	12.0	0	0	0	0
54	7287	120	89.6	92.1	68.8	73.8	51.4	4.1	9.1	0
60	10440	11	36.3	54.5	27.2	54.5	18.1	0	0	0
61	2610	163	72.7	55.0	40.9	38.5	17.7	12.8	24.4	0
Mean	9800	110	78	55	41	30	19	8	6	7

Fig. 2. Comparison of Techniques
(Percent Maturation)

Sample/Control

Tech- nique	Num- ber	Mean Asexual Parasite ³ Count/mm ³	Mean Number of Schizonts per 200 parasites	Chloroquine Concentration (nanomols/ml)															
				0.2	0.4	0.5	0.8	1	1.2	1.25	1.5	1.6	2	2.4	2.5	3	3.2	4	6.5
"Micro"	12	9800	138	85	87		83	69	84			81		68			53		25
"Macro"	12	9800	110		78			55		41		30	19		8	6		7	