

AD-A195 990

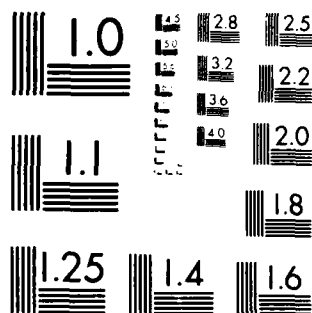
CHEMOTHERAPY OF RODENT MALARIA (U) LONDON SCHOOL OF
HYGIENE AND TROPICAL MEDICINE (ENGLAND) DEPT OF MEDICAL
PROT ZOOTOLOGY W PETERS SEP 86 DAND17-85-C-312

1/3

UNCLASSIFIED

1/6 6/3

NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

AD-A195 990

DTIC FILE COPY

AD

4

CHEMOTHERAPY OF RODENT MALARIA

ANNUAL REPORT

PART TWO

WALLACE PETERS MD DSc

SEPTEMBER 1986

Supported by

US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND

Fort Detrick, Frederick, Maryland 21701-5012

Contract No DAMD17-85-C-5172

Department of Medical Protozoology

London School of Hygiene and Tropical Medicine

Keppel Street

London, WC1E 7HT, UK

DTIC
ELECTE
JUN 09 1988
S
CD
D

Approved for public release; distribution unlimited

The findings in this report are not to be construed as an official Department of the Army position unless so designated in other authorised documents.

88 5 31 157

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION Unclassified			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution unlimited		
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE					
4. PERFORMING ORGANIZATION REPORT NUMBER(S)			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION London School of Hygiene and Tropical Medicine		6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION		
6c. ADDRESS (City, State, and ZIP Code) Keppel Street, London, WC1E 7HT, UK			7b. ADDRESS (City, State, and ZIP Code)		
8a. NAME OF FUNDING/SPONSORING ORGANIZATION U.S. Army Medical Research & Development Command		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER Contract No. DAMD17-85-C-5172		
8c. ADDRESS (City, State, and ZIP Code) Fort Detrick, Frederick, Maryland 21701-5012			10. SOURCE OF FUNDING NUMBERS		
			PROGRAM ELEMENT NO. 62770A	PROJECT NO. 3MI- 62770A870	TASK NO. AJ
			WORK UNIT ACCESSION NO. 010		
11. TITLE (Include Security Classification) Chemotherapy of Rodent Malaria					
12. PERSONAL AUTHOR(S) Wallace Peters, M.D., DSc					
13a. TYPE OF REPORT Annual Report*		13b. TIME COVERED FROM 7/1/85 to 6/30/86		14. DATE OF REPORT (Year, Month, Day) 1986 September	
15. PAGE COUNT 222					
16. SUPPLEMENTARY NOTATION *Part Two					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	Malaria; blood schizontocidal test data; causal prophylactic test data; gametocytocidal test data; sporontocidal test data; cross-resistance test data. (K-). ←		
06	13				
06	15				
19. ABSTRACT (Continue on reverse if necessary and identify by block number) Detailed summary sheets from tests for blood schizontocidal, causal prophylactic, gametocytocidal and sporontocidal activity are included as Appendices of the report, together with the results of cross-resistance tests on a number of resistant strains of rodent malaria. <i>This volume consists of test data. Keywords:</i>					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT ☐ UNCLASSIFIED/UNLIMITED ☒ SAME AS RPT ☐ DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION Unclassified		
22a. NAME OF RESPONSIBLE INDIVIDUAL Mrs. Virginia Miller			22b. TELEPHONE (Include Area Code) 301/663-7325		22c. OFFICE SYMBOL SGRD-RMI-S

FOREWORD

In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals" prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Animal Resources, National Research Council (NIH Publication No. 86-23, Revised 1985).



Accession for	
NTIS - GRA&I	☒
ORL - TAB	☐
Unpublished	☐
Justification	
By	
Date	
Approved by	
Date	
A-1	

5.3 BLOOD SCHIZONTOCIDAL TEST DATA

TABLE 9

Strain	Daily dose mg/kg DO-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	72.5 ± 4.0
	3.0	5		-	52.1 ± 6.8
N	10.0	5	1	-	44.8 ± 8.4
	30.0	5		-	44.1 ± 3.2
	100.0	5		-	35.5 ± 5.3
	Ø	10		25.0	

$$ED_{50}(\text{range}) \quad 10.0(1.9 - 44.0)$$

ED₉₀(range) 600(120->1000) Interpolated graphically

Resistance factor I_{90} ED₅₀(range)ED₉₀ (range)Resistance factor I_{90}

3

TABLE 10

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}				
	1.0	5		-	90.6 ± 3.2				
	3.0	5		-	92.4 ± 4.6				
N	10.0	5	1	-	81.7 ± 5.3				
	30.0	5		-	80.8 ± 5.3				
	100.0	5		-	5.6 ± 4.0				
	Ø	10		28.6					
ED ₅₀ (range) 31.0(26.0 - 65.0)									
ED ₉₀ (range) 80.0(40.0 - 165)									
Resistance factor I ₉₀									
ED ₅₀ (range)									
ED ₉₀ (range)									
Resistance factor I ₉₀									

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE II

COMPOUND NAME Ivermectin
 OR NUMBER LON 2025 PARASITE (SUB)SPECIES P. berghei
 FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV
 MAXIMUM TOLERATED DOSE (MTD) >3.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	$\frac{\text{Treated PR\%}}{\text{Control PR\%}} \times 100$
	0.1	5		-	89.7 ± 4.8
	0.3	5		-	77.4 ± 3.8
N	1.0	5	1	-	73.0 ± 2.4
	3.0	5		-	70.9 ± 3.9
	∅	10		25.0	
ED ₅₀ (range)					
ED ₉₀ (range) NA 3.0					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 12

COMPOUND NAME Doxycycline

OR NUMBER LON.2023..... PARASITE (SUB)SPECIES P. baghei.....

FORMULATION Tween 80 / H₂O.. ROUTE OF ADMINISTRATION : SC / IP / PO / IV

MAXIMUM TOLERATED DOSE (MTD) > 100.. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	66.9 ± 3.0
	3.0	5		-	59.2 ± 1.2
N	10.0	5	1	-	30.8 ± 4.0
	30.0	5		-	1.9 ± 1.1
	100.0	5		-	0.5 ± 0.3
	Ø	10		42.6	

ED₅₀(range) 2.3 (<1.0 - 5.5)

ED₉₀(range) 15.0 (5.5 - 36.0)

Resistance factor I₉₀ 1.0

	1.0	5		-	90.2 ± 3.4
	3.0	5		-	74.1 ± 4.6
NS	10.0	5	1	-	45.5 ± 10.8
	30.0	5		-	2.1 ± 0.8
	100.0	5		-	0
	Ø	10		20.8	

ED₅₀(range) 5.0 (2.6 - 11.0)

ED₉₀(range) 14.6 (7.6 - 33.0)

Resistance factor I₉₀ 1.0

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 13

COMPOUND NAME Doxycycline

OR NUMBER Lon 2023 PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	80.2 ± 8.7
	10.0	5		-	32.3 ± 7.2
N/1100	30.0	5	1	-	1.2 ± 0.9
	100.0	5		-	0
	∅	10		8.8	
ED ₅₀ (range) 6.0(3.7 - 8.2)					
ED ₉₀ (range) 15.2(9.7 - 21.0)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	60.9 ± 11.2
	3.0	5		-	37.7 ± 7.7
Q	10.0	5	1	-	17.1 ± 7.4
	30.0	5		-	0.6 ± 0.5
	100.0	5		-	0
	∅	10		7.0	
ED ₅₀ (range) 5.4(2.2 - 12.6)					
ED ₉₀ (range) 26.0(10.5 - 60.0)					
Resistance factor I ₉₀ 1.7					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

TABLE 14

OR NUMBER LON 2023 PARASITE (SUB)SPECIES P. berghei

MAXIMUM TOLERATED DOSE (MTD) > 100 MG/KG X 4.

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 15

COMPOUND NAME **ICI 56,780**
OR NUMBER **LIV 1001** PARASITE (SUB)SPECIES **P. berghei**
FORMULATION **Tween 80/H₂O** ROUTE OF ADMINISTRATION : **SC/PP/PO/IV**
MAXIMUM TOLERATED DOSE (MTD) **>10**... MG/KG X **4**.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	86.2 ± 2.7
	0.3	5		-	62.5 ± 8.5
N	1.0	5	1	-	52.4 ± 10.0
s.c.	3.0	5		-	5.3 ± 2.1
	10.0	5		-	0.01 ± 0.01
	Ø	10		26.9	
ED ₅₀ (range) 0.5(0.2-1.2)					
ED ₉₀ (range) 1.3(0.6-3.5)					
Resistance factor I ₉₀ 1.0					
	0.1	5		-	83.9 ± 2.1
	0.3	5		-	80.7 ± 3.0
N	1.0	5		-	77.5 ± 3.1
p.o.	3.0	5	1	-	72.9 ± 1.6
	10.0	5		-	44.1 ± 4.8
	Ø	10		26.9	
ED ₅₀ (range) 7.6(6.1-10.0)					
ED ₉₀ (range) 57.0(46.0-74.0)					
Resistance factor I ₉₀ 1.0					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 16

COMPOUND NAME ICI 56,780
OR NUMBER LIV 1001 PARASITE (SUB)SPECIES P. berghei
FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/PP/PO/IV
MAXIMUM TOLERATED DOSE (MTD) >10 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	98.4 ± 2.7
	0.3	6		-	93.5 ± 4.4
NS	1.0	5	1	-	42.5 ± 15.6
s.c.	3.0	5		-	0.6 ± 0.5
	10.0	5		-	0.1 ± 0.1
	Ø	10		22.1	
ED ₅₀ (range) 0.6(0.3-1.4)					
ED ₉₀ (range) 1.8(0.7-3.9)					
Resistance factor I ₉₀ 1.4					
	0.1	5		-	100 ± 0.6
	0.3	5		-	100 ± 2.0
NS	1.0	5	1	-	100 ± 0.2
p.o.	3.0	5		-	81.9 ± 3.6
	10.0	5		-	48.1 ± 12.9
	Ø	10		22.1	
ED ₅₀ (range) 9.3(6.0-14.0)					
ED ₉₀ (range) 44.0(29.0-65.0)					
Resistance factor I ₉₀ 0.8					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 17

COMPOUND NAME **ICI 56,780**

OR NUMBER **LIV. 1001** PARASITE (SUB)SPECIES **P. berghei**

FORMULATION **Tween 80/H₂O** ROUTE OF ADMINISTRATION : **SC/HP/PO/HV**

MAXIMUM TOLERATED DOSE (MTD) **>10** MG/KG X **4**.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	0.1	5		-	100 ± 5.1
	0.3	5		-	44.9 ± 14.2
N/1100	1.0	5	1	-	4.6 ± 2.0
Sc	3.0	5		-	0.4 ± 0.2
	10.0	5		-	0
	∅	10		19.9	
ED ₅₀ (range) 0.2(0.2-0.3)					
ED ₉₀ (range) 0.7(0.5-1.0)					
Resistance factor I ₉₀ 0.5					
	0.1	5		-	88.3 ± 2.1
	0.3	5		-	66.7 ± 8.0
N/1100	1.0	5	1	-	50.2 ± 6.6
po	3.0	5		-	28.2 ± 12.4
	10.0	5		-	19.7 ± 7.5
	∅	10		19.9	
ED ₅₀ (range) 1.0(0.5-2.3)					
ED ₉₀ (range) 18.5(8.5-41.0)					
Resistance factor I ₉₀ 0.3					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 18

COMPOUND NAME **ICI 56,780**

OR NUMBER **LIV 1001** PARASITE (SUB)SPECIES **P. berghei**

FORMULATION **Tween 80 / H₂O** ROUTE OF ADMINISTRATION : **SC/PP/PO/IV**

MAXIMUM TOLERATED DOSE (MTD) **>10** MG/KG X **4**.

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.1	5		-	69.2 ± 13.0
	0.3	5		-	48.7 ± 10.6
Q	1.0	5	1	-	45.7 ± 17.2
sc	3.0	5		-	0.5 ± 0.4
	10.0	5		-	0.25 ± 0.2
	Ø	10		8.7	
ED ₅₀ (range) 0.3(0.1 - 1.1)					
ED ₉₀ (range) 1.4(0.3 - 5.5)					
Resistance factor I ₉₀ 1.1					
	0.1	5		-	87.4 ± 3.1
	0.3	5		-	70.1 ± 13.0
Q	1.0	5	1	-	64.8 ± 11.9
po	3.0	5		-	48.3 ± 9.3
	10.0	5		-	21.6 ± 5.3
	Ø	10		8.7	
ED ₅₀ (range) 1.6(0.4 - 5.0)					
ED ₉₀ (range) 32.5(9.3 - 100)					
Resistance factor I ₉₀ 0.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

5.4 CAUSAL PROPHYLACTIC TEST DATA

CAUSAL PROPHYLAXIS TEST NO: 3764

DATE: 8.10.85

COMPOUND: LON/ PRIMAQUINE DIPHOSPHATE BOTTLE NO:

FORMULATION: Tween 80/H₂OROUTE: sc ~~tip~~ po

TIME AFTER INFECTION: 2 HOURS

HOST: ♂ TFW mice

PARASITE: P. yoelii nigeriensis

STRAIN: NIG

DOSE mgm/kg	PATENCY RATE		GNP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	(a) 5.12	(c) 2.89				
30.0	5/5		(b) 5.58	(d)	0.46			INACTIVE
60.0	0/5		(b) >14	(d)	> 8.88			FULLY ACTIVE
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				

MINIMUM FULLY ACTIVE DOSE 30-60 mg/kg
 RESIDUAL ACTIVITY: NIL
 PRESENT AT mg/kg
 MARKED AT mg/kg

PRINCIPAL INVESTIGATOR: PROFESSOR W PETE!
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

TABLE 19

DATE: 8.10.85

CAUSAL PROPHYLAXIS TEST NO: 3764

BOTTLE NO: BK 74491

COMPOUND: LON/ 1956

FORMULATION: Tween 80/H₂O

TIME AFTER INFECTION: 2 HOURS

H/ST: ♂ TFW mice

PARASITE: P. yoelii nigeriensis

STRAIN: NIG

DOSE mgm/kg	PATENCY RATE		GNP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected (a)	Sporozoite and blood infected (c)	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	5.12	2.89				
30.0	5/5	5/5	4.75	3.46	NIL	0.57	NIL	IN ACTIVE
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				

TABLE 20

MINIMUM FULLY ACTIVE DOSE µg/kg
 RESIDUAL ACTIVITY: NIL
 PRESENT AT µg/kg
 MARKED AT µg/kg

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

DATE: 22.10.85

CAUSAL PROPHYLAXIS TEST NO: 3819

COMPOUND: LON/1956

FORMULATION: Tween 80/H₂O

HOST: ♂ TFW mice

BOTTLE NO: BK 74491

ROUTE: sc/tp/pe

PARASITE: *P. yoelii nigeriensis*

TIME AFTER INFECTION: 2 HOURS

STRAIN: NIG

DOSE mgm/kg	PATENCY RATE		GMP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	(a) 5.46	(c) 3.62				
100.0	0/5	3/5 *	(b) >14.00	(d) 3.28	> 8.54	NIL	> 8.54	FULLY ACTIVE
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				

TABLE 21

MINIMUM FULLY ACTIVE DOSE < 100 mg/kg
RESIDUAL ACTIVITY: NIL
PRESENT AT 100 mg/kg
MARKED AT

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

* 2/5 DIED

DATE: 8.10.85

CAUSAL PROPHYLAXIS TEST NO: 3764

BOTTLE NO: BK 73127

COMPOUND: LON/1957

ROUTE: sc/~~ip~~ TIME AFTER INFECTION: 2 HOURS

PARASIT: P. yoelii nigeriensis STRAIN: NIC

FO: MULATION: Tween 80/H₂O

HOST: ♂ TFW mice

DOSE mgm/kg	PATENCY RATE		GMP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected (a)	Sporozoite and blood infected (c)	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	5.12	2.89				
30.0	5/5	5/5	4.87	3.07	NIL	0.18	NIL	INACTIVE

TABLE 22

MIN NUM FULLY ACTIVE DOSE mg/kg
 RES DUAL ACTIVITY: NIL
 PRESENT AT mg/kg
 MARKED AT mg/kg

PRINCIPAL INVESTIGATOR: PROFESSOR W PETER
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

DATE: 22.10.85

CAUSAL PROPHYLAXIS TEST NO: 3819

COMPOUND: LON/ 1957 WR

BOTTLE NO: BK 73127

FORMULATION: Tween 80/H₂O

ROUTE: sc ~~ip~~

TIME AFTER INFECTION: 2 HOURS

HOST: ♂ TFW mice

PARASITE:

P. yoelii nigeriensis

STRAIN: NIG

DOSE mgm/kg	PATENCY RATE		GFP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	(a) 5.46	(c) 3.62				
100.0	0/5	5/5	(b) > 14.00	(d) 3.06	> 8.54	NIL	> 8.54	FULLY ACTIVE
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				

MINIMUM FULLY ACTIVE DOSE < 100 mg/kg
RESIDUAL ACTIVITY: NIL
PRESENT AT 100 mg/kg
MARKED AT mg/kg

TABLE 23

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

DATE: 22.10.85

CAUSAL PROPHYLAXIS TEST NO: 3819

COMPOUND: LON/ 2010 BOTTLE NO: BL 05848

FORMULATION: Tween 80/H₂O ROUTE: sc/4p/4p TIME AFTER INFECTION: 2 HOURS

HOST: ♂ TFW mice PARASITE: P. yoelii nigeriensis STRAIN: NIC

DOSE mgm/kg	PATENCY RATE		GMP 2% P			ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected (a)	Sporozoite and blood infected (c)	Sporozoite infected (d)	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	5.46	3.62	(d)	0.30	0.22	0.08	INACTIVE
1.0	5/5	5/5	5.76	3.84	(d)	> 1.57	0.55	> 1.02	SLIGHTLY ACTIVE
3.0	4/5	5/5	> 7.03	4.17	(d)	> 8.54	0.01	> 8.53	FULLY ACTIVE
10.0	0/5	5/5	> 14.00	3.63	(d)				
			(b)	(d)	(d)				
			(b)	(d)	(d)				
			(b)	(d)	(d)				

MINIMUM FULLY ACTIVE DOSE 3.0 - 10.0 mg/kg
 RESIDUAL ACTIVITY: NIL
 PRESENT AT 10.0 mg/kg
 MARKED AT mg/kg

PRINCIPAL INVESTIGATOR: PROFESSOR W PETER
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

TABLE 24

DATE: 8.10.85

CAU AL PROPHYLAXIS TEST NO: 3764

BOTTLE NO: BLO7762

CONFOUND: LON/ 2024 WR 254594

TIME AFTER INFECTION: 2 HOURS

ROUTE: sc ~~ip~~ po

FORMULATION: Tween 80/H₂O

STRAIN: NIC

PARASITE: P. yoelii nigeriensis

HOST: ♂ TFW mice

DOSE mgm/kg	PATENCY RATE			GMP 2% P			ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	(a)	(b)	(c)	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	5/5	(a)	(b)	(c)				
30.0	5/5	5/5	5/5	(b)	(b)	(d)	NIL	0.02	NIL	INACTIVE
				(b)	(b)	(d)				
				(b)	(b)	(d)				
				(b)	(b)	(d)				
				(b)	(b)	(d)				
				(b)	(b)	(d)				
				(b)	(b)	(d)				

TABLE 25

MINIMUM FULLY ACTIVE DOSE mg/kg
 RESIDUAL ACTIVITY: NIL
 PRESENT AT mg/kg
 MARKED AT mg/kg

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

DATE: 22.10.85

CANAL PROPHYLAXIS TEST NO: 3819

CO: BOUND: LON/ 2024 BOTTLE NO: BL 07762

POPULATION: Tween 80/H₂O ROUTE: sc/4p/pe TIME AFTER INFECTION: 2 HOURS

HOST: ♂ TFW mice PARASITE: P. yoelii nigeriensis STRAIN: NIG

DOSE mgm/kg	PATENCY RATE		GNP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	4/s	S/S	(a) 5.46	(c) 3.62				
100.0	1/s	S/S	(b) >9.06	(d) 3.07	>3.60	NIL	>3.60	ACTIVE
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				
			(b)	(d)				

MINIMUM FULLY ACTIVE DOSE > 100 mg/kg
 RESIDUAL ACTIVITY: NIL
 MARKED AT 100 mg/kg
 MARKED AT mg/kg

TABLE 26

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

DATE: 22.10.85

CAUSAL PROPHYLAXIS TEST NO: 3819

COMPOUND: LON/ 1001

ICI 56,780

BOTTLE NO:

FORMULATION: Tween 80/H₂O

TIME AFTER INFECTION: 2 HOURS

HOST: ♂ TFW mice

PARASITE: P. yoelii nigeriensis

STRAIN: NIG

DOSE mgm/kg	PATENCY RATE			GRP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	(c)	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	(a) 5.46	(c) 3.62					
10.0	2/5	5/5	(b) >11.05	(d) 4.66		>5.59	1.04	>5.54	ACTIVE. SLIGHT RESIDUAL ACTIVITY
30.0	1/5	4/5	(b) >12.58	(d) 8.95		>7.12	5.33	>1.79	ACTIVE. SOME RESIDUAL ACTIVITY
60.0	0/5	5/5	(b) >14.00	(d) 6.3c		>8.54	2.68	>5.86	FULLY ACTIVE.
100.0	0/5	5/5	(b) >14.00	(d) 8.64		>8.54	5.02	>3.52	SOME RESIDUAL ACTIVITY
			(t) (b)	(d)					
			(b)	(d)					

MINIMUM FULLY ACTIVE DOSE ... 30.7.60

mg/kg

RESIDUAL ACTIVITY: ~~***~~

PRESENT AT 10.0

mg/kg

MARKED AT

mg/kg

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

TABLE 27

CASAL PROPHYLAXIS TEST NO: 5068

DATE: 19.8.86

COMPOUND: LON/ 2062 5-hydroxyprimaquine BOTTLE NO:

FORMULATION: Tween 80/H₂O

ROUTE: sc ~~ip~~ ^{iv}

TIME AFTER INFECTION: 2 HOURS

HOST: ♂ TFW mice

PARASITE: P. yoelii nigeriensis

STRAIN: NIC

DOSE mg/kg	PATENCY RATE		GMP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	(a) 5.63	(c) 1.00				
3.0	4/5	5/5	(b) 8.06	(d) 1.18	2.43	0.18	2.25	SLIGHTLY ACTIVE
10.0	2/5	5/5	(b) >10.88	(d) 1.45	>5.25	0.45	>4.80	ACTIVE
30.0	0/5	3/5 *	(b) >14	(d) 3.76	>8.37	2.76	>5.61	FULLY ACTIVE SOME RESIDUAL ACTIVITY
60.0	0/5	1/5 **	(b) -	(d) 4.59				~ LD90 RESIDUAL ACTIVITY ON
			(b)	(d)				
			(b)	(d)				

MINIMUM FULLY ACTIVE DOSE 10.0 - 30.0 mg/kg
 RESIDUAL ACTIVITY: ***
 PRESENT AT 30.0 mg/kg
 MARKED AT mg/kg

* 2/5 DIED
 ** 4/5 DIED
 † 5/5 DIED

TABLE 28

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

DATE: 19.8.86

CAUSAL PROPHYLAXIS TEST NO: 5068

COMPOUND: LON/ 2063 5-hydroxy-6-desmethyl primaquine BOTTLE NO:

FORMULATION: Tween 80/H₂O

ROUTE: sc/

TIME AFTER INFECTION: 2 HOURS

TESTED: ♂ IFW mice

PARASITE: P. yoelii nigeriensis

STRAIN: NIG

DOSE mgm/kg	PATENCY RATE		CMP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	(a) 5.63	(c) 1.00				
3.0	5/5	5/5	(b) 6.25	(d) 1.74	0.62	0.74	NIL	INACTIVE
10.0	5/5	5/5	(b) >11.73	(d) 1.09	>6.10	0.09	>6.01	ACTIVE
30.0	2/5	5/5	(b) >10.02	(d) 1.82	>4.39	0.82	>3.57	ACTIVE
60.0	0/5	2/5 *	(b) >14	(d) 1.46	>8.37	0.46	>7.91	FULLY ACTIVE BUT TOXIC
			(c) (b)	(d) (d)				

TABLE 29

MINIMUM FULLY ACTIVE DOSE 30.0 - 60.0 mg/kg
 RESIDUAL ACTIVITY: NIL
 MARKED AT 60.0 mg/kg
 MARKED AT mg/kg
 * 3/5 DIED
 ** 4/5 DIED

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

DATE: 12.8.86

CAUSAL PROPHYLAXIS TEST NO: 5053

SUBSTRAND: LON/ 2059 5,6 - dihydroxy - 8 - aminoquinoline BOTTLE NO: (AQD)

FORMULATION: Tween 80/H₂O ROUTE: sc ~~sc~~ ^{ip}

HOST: ♂ TFW mice PARANTHE: P. yoelii nigeriensis STRAIN: NIG

TIME AFTER INFECTION: 2 HOURS

DOSE mgm/kg	PATENCY RATE		GMP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	(a) 5.69	(c) 1.93				
3.0	5/5	5/5	(b) 5.83	(d) 1.93	0.14	NIL	0.14	INACTIVE
10.0	5/5	5/5	(b) 6.66	(d) 2.05	0.97	0.12	0.85	INACTIVE
30.0	2/5 *	5/5	(b) > 9.96	(d) 2.08	> 4.27	0.15	> 4.12	ACTIVE
60.0	1/5 **	4/5	(b) > 12.34	(d) 2.64	> 6.65	0.71	> 5.94	ACTIVE BUT TOXIC
			(b)	(d)				
			(b)	(d)				

TABLE 30

PRINCIPAL INVESTIGATOR: PROFESSOR W PETER
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

WILKINSON FULLY ACTIVE DOSE mg/kg
RESIDUAL ACTIVITY: NIL
PRESENT AT mg/kg
MARKED AT mg/kg

* 1/5 DIED
** 3/5 DIED

DATE: 12.8.86

CAUSAL PROPHYLAXIS TEST NO: 5053

COMPOUND: LON/ 2058 6-methoxy-8-aminoguanine (MAQ) BOTTLE NO:

F EMULSION: Tween 80/H₂O ROUTE: sc ~~ip~~ ~~po~~

TIME AFTER INFECTION: 2 HOURS STRAIN: NIG

PARASITE: P. yoelii nigeriensis

HOST: ♂ TFV mice

DOSE mg/kg	FATENCY RATE		GIP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	(a) 5.69	(c) 1.93				
3.0	5/5	5/5	(b) 6.50	(d) 1.91	0.81	NIL	0.81	INACTIVE
10.0	4/5	5/5	(b) 7.00	(d) 2.44	1.31	0.51	0.80	INACTIVE
30.0	4/5	5/5	(b) 7.76	(d) 1.92	2.07	NIL	2.07	Slightly ACTIVE
60.0	2/5	5/5	(b) >11.92	(d) 2.18	> 6.23	0.25	> 5.98	ACTIVE
			(b)	(d)				
			(b)	(d)				

MINIMUM FULLY ACTIVE DOSE > 60.0 mg/kg
 RESIDUAL ACTIVITY: NIL
 PRESENT AT 60.0 mg/kg
 MARKED AT mg/kg

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

TABLE 31

DATE: 19.8.86

CAUSAL PROPHYLAXIS TEST NO: 5068

COMPOUND: LON/ 2064 carboxymetabolite of primaquine BOTTLE NO:

FORMULATION: Tween 80/H₂O ROUTE: sc ~~ip~~

HOST: ♂ TFV mice PARASITE: P. yoelii nigeriensis STRAIN: NIC

TIME AFTER INFECTION: 2 HOURS

STRAIN: NIC

DOSE mg/kg	PATENCY RATE		GMP 2% P		ACTIVITY VALUES			COMMENT
	Sporozoite infected	Sporozoite and blood infected	Sporozoite infected	Sporozoite and blood infected	Total activity (b-a)	Residual activity (d-c)	Prophylactic activity (b-a)-(d-c)	
Ø	5/5	5/5	(a) 5.63	(c) 1.00				
3.0	5/5	5/5	(b) 6.71	(d) 1.43	1.08	0.43	0.65	INACTIVE
10.0	5/5	5/5	(b) 6.36	(d) 1.03	0.73	0.03	0.70	INACTIVE
30.0	5/5	5/5	(b) 5.00	(d) 1.03	NIL	0.03	NIL	INACTIVE
60.0	5/5	5/5	(b) 6.17	(d) 1.82	0.54	0.82	NIL	INACTIVE
			(b)	(d)				
			(b)	(d)				

MINIMUM FULLY ACTIVE DOSE mg/kg
 RESIDUAL ACTIVITY: NIL
 PRESENT AT mg/kg
 MARKED AT mg/kg

TABLE 32

PRINCIPAL INVESTIGATOR: PROFESSOR W PETERS
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

5.5 GAMETOCYTOCIDAL TEST DATA

SUMMARY OF ANTIMALARIAL TESTS

TABLE 33

GAMETOCYCIDAL ACTIVITY

COMPOUND : LON 2010 WR 254419 BL 05848

FORMULATION : TWEEN 80 / H₂O

ROUTE : SC / IP / PO / IV

MAXIMUM FULLY TOLERATED DOSE : >100 mg / kg X 1

EXPERIMENT No.: 4144

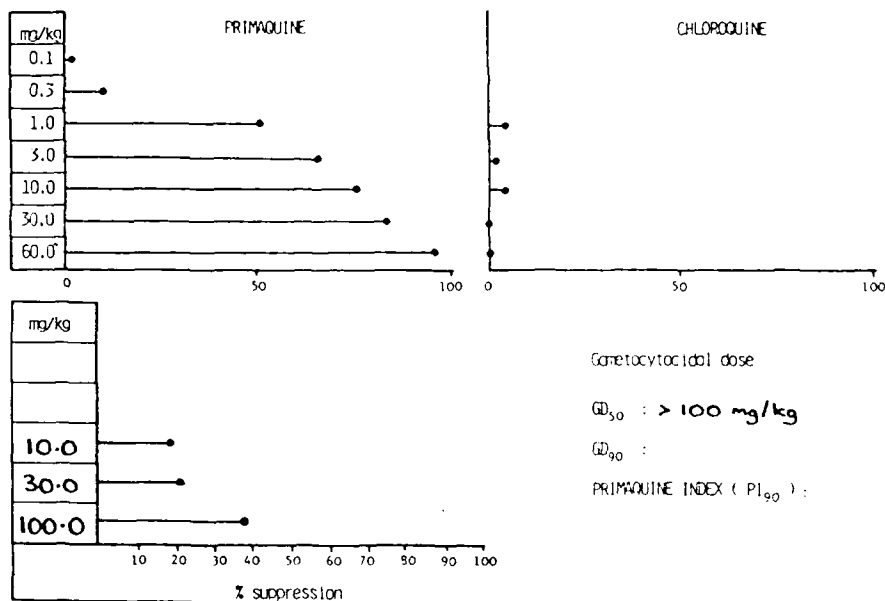
DATE : 19.2.86

PARASITE : *Plasmodium yoelii nigeriensis*

VERTEBRATE HOST : ♂ TFW MICE

INVERTEBRATE HOST : *Anopheles stephensi*

DOSE mg/kg	OOCYST COUNTS D+7										MEAN	% CONTROL
0	22	20	18	17	21	28	13	14	17	15	18.5	100
10.0	22	16	23	12	14	11	10	16	16	12	15.2	82.2
30.0	17	16	11	15	17	21	11	16	12	12	14.8	80.0
100.0	11	13	15	12	13	5	11	11	12	12	11.5	62.2



Principal Investigator : Professor W. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS

TABLE 34

GAMETOCYCIDAL ACTIVITY

COMPOUND : LON 2024 WR 254594 BL 07762

FORMULATION : TWEEN 80 / H₂O

ROUTE : SC / IP / PO / IV

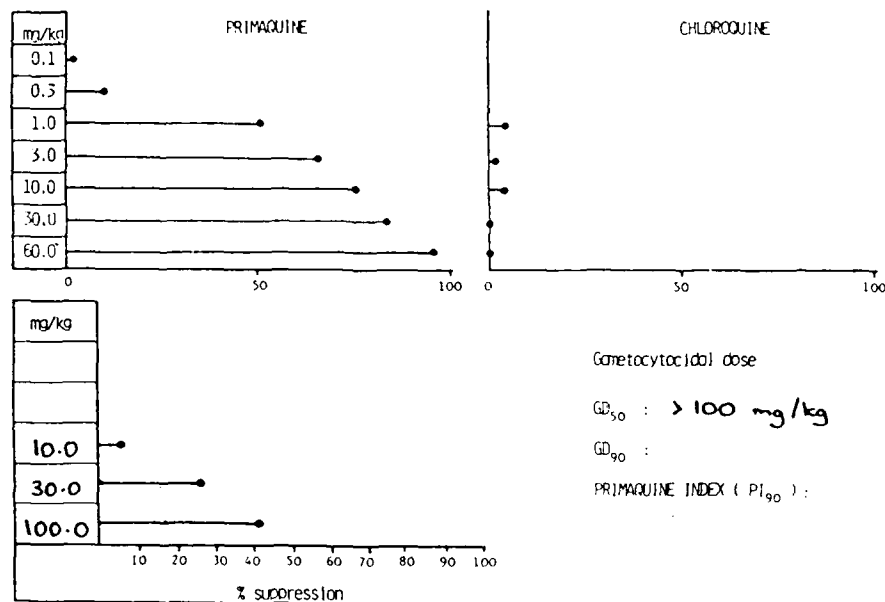
MAXIMUM FULLY TOLERATED DOSE : >100 mg / kg X 1 EXPERIMENT No.: 4144 DATE : 19.2.86

PARASITE : *Plasmodium yoelii nigeriensis*

VERTEBRATE HOST : ♂ TFW MICE

INVERTEBRATE HOST : *Anopheles stephensi*

DOSE mg/kg	OOCYST COUNTS D+7										MEAN	% CONTROL
0	22	20	18	17	21	28	13	14	17	15	18.5	100
10.0	20	22	21	22	14	21	14	17	24	12	17.7	95.7
30.0	10	13	14	13	14	11	18	14	17	13	13.7	74.0
100.0	7	11	16	12	7	12	12	10	11	11	10.9	58.9



Principal Investigator : Professor W. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS

TABLE 35

GAMETOCYCIDAL ACTIVITY

COMPOUND : LON 2046

WR

BL09686

FORMULATION : TWEEN 80 / H₂O

ROUTE : SC / IP / PO / IV

MAXIMUM FULLY TOLERATED DOSE : >100 mg / kg X 1

EXPERIMENT No.: 4120

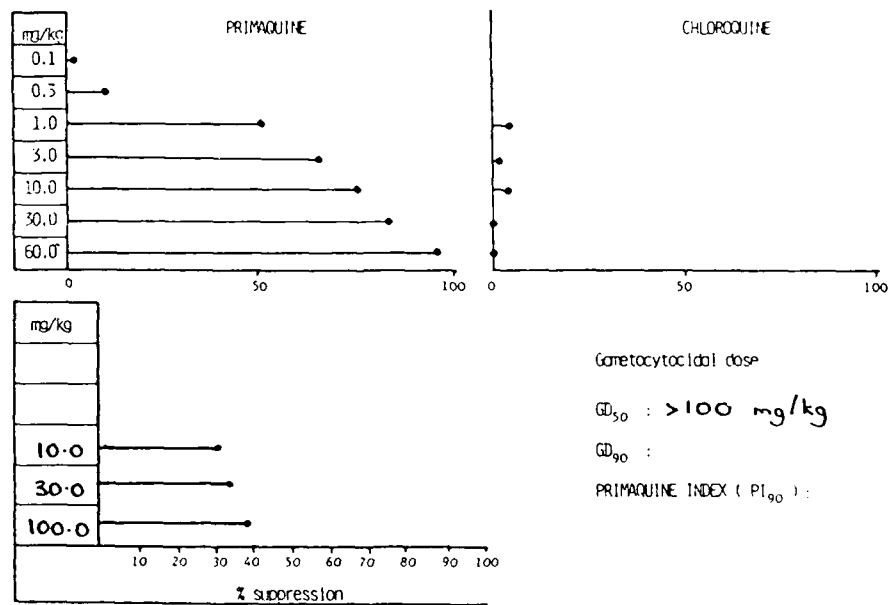
DATE : 12.2.86

PARASITE : *Plasmodium yoelii* nigeriensis

VERTEBRATE HOST : ♂ TFW MICE

INVERTEBRATE HOST : *Anopheles stephensi*

DOSE mg/kg	OOCYST COUNTS D+7										MEAN	% CONTROL
0	33	17	24	25	17	30	18	11	18	11	20.4	100
10.0	37	16	20	14	12	5	4	6	17	12	14.3	70.1
30.0	10	8	9	9	31	16	7	15	17	14	13.6	66.7
100.0	5	7	41	10	6	8	5	27	8	9	12.6	61.8



Principal Investigator : Professor W. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS

TABLE 36

GAMETOCYTOCIDAL ACTIVITY

COMPOUND : LON 1001 ICI 56,780

FORMULATION : TWEEN 80 / H₂OROUTE : SC ~~IP~~ ~~PO~~ ~~IV~~

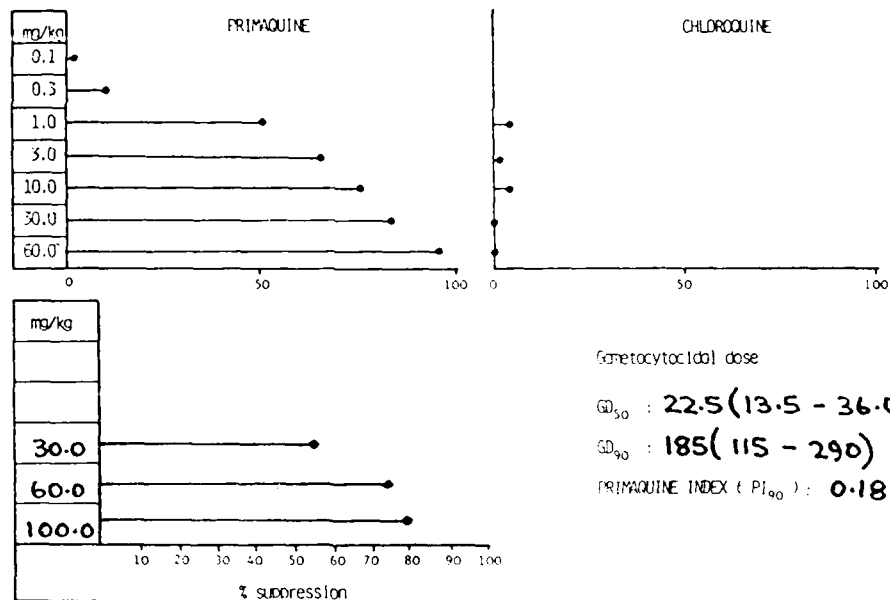
MAXIMUM FULLY TOLERATED DOSE : >100 mg / kg X 1 EXPERIMENT No.: 4120 DATE : 12.2.86

PARASITE : *Plasmodium yoelii nigeriensis*

VERTEBRATE HOST : ♂ TFW MICE

INVERTEBRATE HOST : *Anopheles stephensi*

DOSE mg/kg	OOCYST COUNTS D+7										MEAN	% CONTROL
0	33	17	24	25	17	30	18	11	18	11	20.4	100
30.0	12	7	5	14	16	9	4	2	10	16	9.5	46.6 ± 7.
60.0	4	3	8	4	5	7	6	4	8	3	5.2	25.5 ± 2.
100.0	2	6	4	2	4	4	3	5	9	4	4.3	21.1 ± 3.



Principal Investigator : Professor W. Peters
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

5.6 SPORONTOCIDAL TEST™ DATA

SUMMARY OF ANTIMALARIAL TESTS
SPORONTICIDAL ACTIVITY

TABLE 37

COMPOUND : 18M CYCLOQUANIL

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : Plasmodium yoelii nigeriensis

VERTEBRATE HOST : ♂ TFH MICE

INVERTEBRATE HOST : Anopheles stephensi

TOXICITY : TOXIC TO A. stephensi AT 1 : NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER : 4232

DATE : 19/3/86

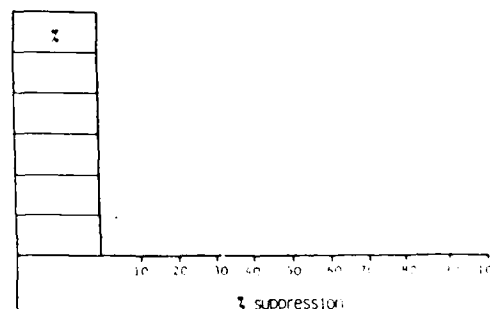
PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	16	11	13	15	10	14	17	11	13	16		100
	14	14	16	10	14	18	16	14			14.0	
0.05	2	0	0	1	1	0					0.7	4.8

~~VERY ACTIVE~~ / ACTIVE / ~~SLIGHTLY ACTIVE~~ / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPORONTICIDAL DOSE (SD₅₀)

SD₅₀ < 0.05 %

SD₉₉ < 0.05 %

Principal Investigator : Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS
SPOROANTOCIDAL ACTIVITY

TABLE 38

COMPOUND : ~~ben~~ PYRIMETHAMINE

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : *Plasmodium yoelii nigeriensis*

VERTEBRATE HOST : ♂ TFW MICE

INVERTEBRATE HOST : *Anopheles stephensi*

TOXICITY : TOXIC TO *A. stephensi* AT ~~1~~ % ; NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER : 4989

DATE : 16.7.86

PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	13	19	15	18	16	14	12	19	19	12		100
	19	10	16	12	12						15.1	
0.05	2	7	5	0	2	1	5	0	1	0		15.2
											2.3	

FULLY ACTIVE / ACTIVE / SLIGHTLY ACTIVE / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPOROANTOCIDAL DOSE (SDD)

SDD₅₀ :

SDD₉₀ :

Principal Investigator : Professor W. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS
SPOROZOITICidal ACTIVITY

TABU 39

COMPOUND : LON 1955 HALOFANTRINE

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : *Plasmodium yoelii nigeriensis*

VERTEBRATE HOST : ♂ FFW MICE

INVERTEBRATE HOST : *Anopheles stephensi*

TOXICITY : ~~LD50 70 mg/kg bw~~ ; NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER : 4597

DATE : 7/5/86

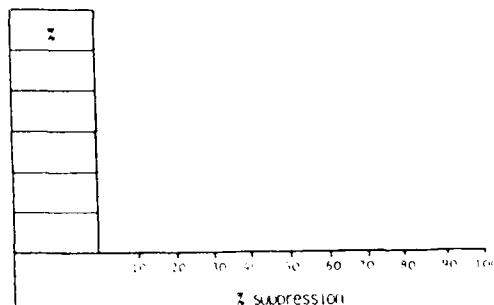
PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	20	17	11	24	17	13	32	23	10	18	18.5	100
0.05	27	4	6	3	6	13	5	10	15	8	9.7	52.4

~~PRELIMINARY TEST~~ / ACTIVE / ~~PRELIMINARY TEST~~ / INACTIVE IN 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPOROZOITICidal DOSE (SD₅₀)

SD₅₀ : ~ 0.05 %

SD₁₀₀

Principal Investigator : Professor W. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS
SPOROANTOCIDAL ACTIVITY

Table 40

COMPOUND : ED₅₀ 1956 WR 8k 74491
FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION
ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS
PARASITE : Plasmodium yoelii nigeriensis
VERTEBRATE HOST : ♂ IFW MICE INVERTEBRATE HOST : Anopheles stephensi
TOXICITY : ~~TOXIC TO Anopheles AT~~ ; NO TOXIC EFFECTS SEEN
EXPERIMENT NUMBER : 4597 DATE : 7/5/86

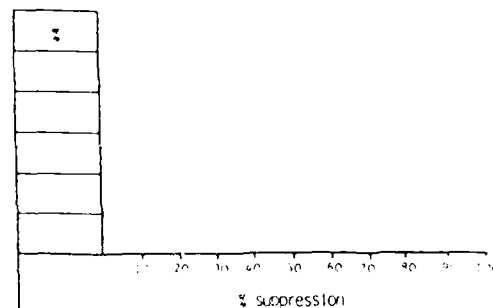
PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	20	17	11	24	17	13	32	23	10	18	18.5	100
0.05	91	28	54	23	37	65	29	36	17		42.2	100

~~SPOROANTOCIDAL ACTIVE~~ INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPOROANTOCIDAL DOSE (SD)

SD₅₀ :

SD₉₀ :

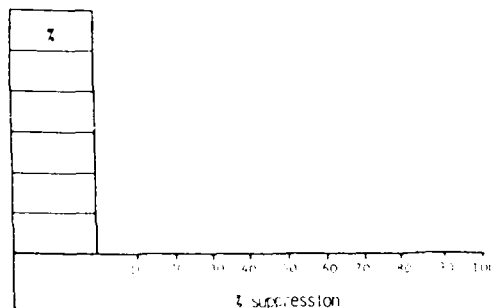
Principal Investigator : Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

TABLE 41

PRELIMINARY TEST

[illegible]

~~USE ACTIVE / ACTIVE / INACTIVE~~ AT 0.05 %

[illegible]

30D₅₀ : < 0.05 %

2019 :

38

SUMMARY OF ANTIMALARIAL TESTS

TABLE 42

SPOROANTICIDAL ACTIVITY

COMPOUND : LON **2010** WR **254419** BL **05848**
 FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION
 ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS
 PARASITE : Plasmodium yoelli nigeriensis
 VERTEBRATE HOST : ♂ TFW MICE INVERTEBRATE HOST : Anopheles stephensi
 TOXICITY : TOXIC TO A. stephensi AT 0.05% ; NO TOXIC EFFECTS SEEN
 EXPERIMENT NUMBER : **4232** DATE : **19/3/86**

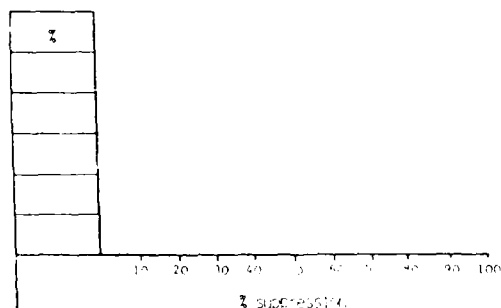
PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	16	11	13	15	10	14	17	11	13	16	14.0	100
	14	14	16	10	14	18	16	14				
0.05	17										17.0	100

FULLY ACTIVE / ACTIVE / SLIGHTLY ACTIVE / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPOROANTICIDAL DOSE (SpD)

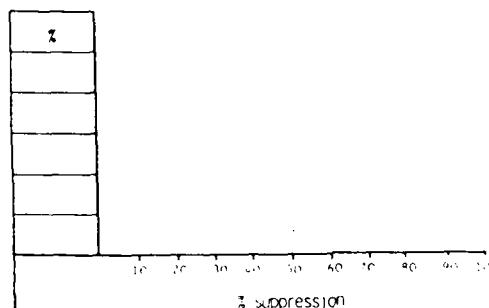
SpD₅₀ :SpD₉₀ :

NA at MTD

Principal Investigator : Professor W. Peters
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

TABLE 43

DATE : 19/3/86

[illegible][illegible]

Soln :

40

SUMMARY OF ANTIMALARIAL TESTS
SPORONTICIDAL ACTIVITY

TABLE 44

COMPOUND : **LDH 2046** **WR** **BL 09686**
 FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION
 ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS
 PARASITE : Plasmodium yoelii nigeriensis
 VERTEBRATE HOST : ♂ FFW MICE INVERTEBRATE HOST : Anopheles stephensi
 TOXICITY : ~~TOXIC TO Anopheles at 0.05 %~~ ; NO TOXIC EFFECTS SEEN
 EXPERIMENT NUMBER : **4232** DATE : **19/3/86**

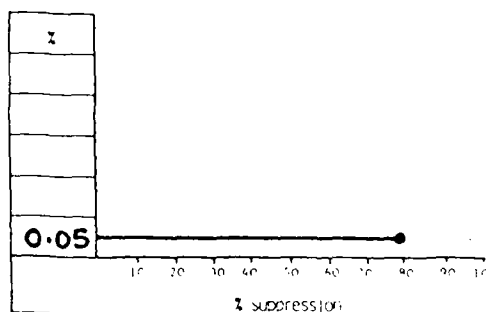
PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	16	11	13	15	10	14	17	11	13	16		100
	14	14	16	10	14	18	16	14			14.0	
0.05	0	0	5	0	1	0	10	0	0	13	2.9	20.7

~~INACTIVE~~ / ACTIVE / ~~SLIGHTLY ACTIVE~~ / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPORONTICIDAL DOSE (S_{0.05})

S_{0.05} : < 0.05 %

S_{0.05} : > 0.05 %

Principal Investigator : Professor H. Peters
 Department of Medical Protozoology
 London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS
SPORONTICIDAL ACTIVITY

TABLE 45

COMPOUND : LON 2058 MAQ

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : *Plasmodium yoelii nigeriensis*

VERTEBRATE HOST : ♂ TFW MICE

INVERTEBRATE HOST : *Anopheles stephensi*

TOXICITY : ~~TOXIC TO *A. stephensi* AT 1 %~~ ; NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER : 4989

DATE : 16.7.86

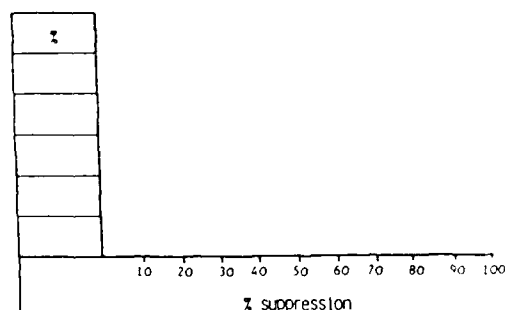
PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	13	19	15	18	16	14	12	19	19	12		100
	19	10	16	12	12						15.1	
0.05	31	16	32	8	22	14	17	4	10	27		100
	12										17.6	

FULLY ACTIVE / ACTIVE / SLIGHTLY ACTIVE / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPORONTICIDAL DOSE (SD)

SD₅₀ :

SD₉₀ :

Principal Investigator : Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS

TABLE 46

SPORONTICIDAL ACTIVITY

COMPOUND : LOM 2059 AQD

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : *Plasmodium yoelii nigeriensis*

VERTEBRATE HOST : ♂ TFW MICE

INVERTEBRATE HOST : *Anopheles stephensi*TOXICITY : ~~TOXIC TO *A. stephensi* AT 1 %~~ ; NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER : 4989 DATE : 16.7.86

PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	13	19	15	18	16	14	12	19	19	12	15.1	100
	19	10	16	12	12							
0.05	7	26	11	32	20	13	44	12	15	8	18.8	100

FULLY ACTIVE / ACTIVE / SLIGHTLY ACTIVE / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



Principal Investigator : Professor W. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS

TABLE 47

SPORONTICIDAL ACTIVITY

COMPOUND : LON 2060 AQL

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : *Plasmodium yoelii* nlaerlensis

VERTEBRATE HOST : ♂ TFH MICE

INVERTEBRATE HOST : *Anopheles stephensi*TOXICITY : ~~TOXIC TO *A. stephensi* AT~~ % ; NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER :

DATE :

PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	13	19	15	12	18	16	14	12	19	19	15.1	100
	19	10	16	12	12							
0.05	12	9	5	14	13	4	9	13	12	10	10.1	66.9

FULLY ACTIVE / ACTIVE / SLIGHTLY ACTIVE / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPORONTICIDAL DOSE (SOD)

SOD₅₀ :SOD₉₀ :

Principal Investigator : Professor W. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS

TABLE 48

SPORONTICIDAL ACTIVITY

COMPOUND : LON 2061 DM 8A9

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : *Plasmodium yoelii nigeriensis*

VERTEBRATE HOST : ♂ TFW MICE

INVERTEBRATE HOST : *Anopheles stephensi*TOXICITY : ~~TOXIC TO A. stephensi AT~~ ; NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER :

DATE :

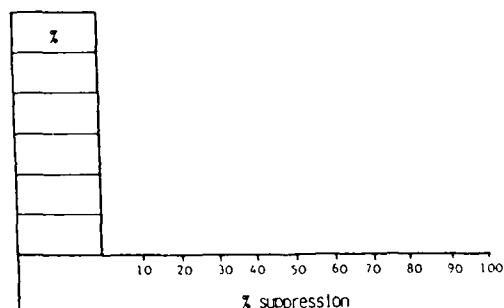
PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	13	19	15	18	16	14	12	19	19	12	15.1	100
	19	10	16	12	12							
0.05	8	6	9	10	9	9	18	6	17	8	10.2	67.6

FULLY ACTIVE / ACTIVE SLIGHTLY ACTIVE / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPORONTICIDAL DOSE (SD)

SD₅₀ :SD₉₀ :

Principal Investigator : Professor W. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS

TABLE 49

SPORONTICIDAL ACTIVITY

COMPOUND : LON 2062

SHPQ

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : Plasmodium yoelii nigeriensis

VERTEBRATE HOST : ♂ TFW MICE

INVERTEBRATE HOST : Anopheles stephensiTOXICITY : TOXIC TO A. stephensi AT % ; NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER :

DATE :

PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	13	15	19	18	16	14	12	19	19	12		100
	19	10	16	12	12						15.1	
0.05	20	41	24	17	9	10	16	17	9	25		100
											18.8	

FULLY ACTIVE / ACTIVE / SLIGHTLY ACTIVE / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPORONTICIDAL DOSE (SD)

SD₅₀ :SD₉₀ :

Principal Investigator : Professor W. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS

TABLE 50

SPORONTICIDAL ACTIVITY

COMPOUND : LCN 2063 DHPQ

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : Plasmodium yoelii nlaerlensis

VERTEBRATE HOST : ♂ TFH MICE

INVERTEBRATE HOST : Anopheles stephensiTOXICITY : TOXIC TO A. stephensi AT 0.05% ; NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER : 4989

DATE : 16.7.86

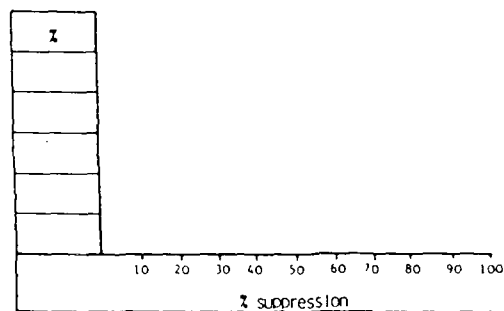
PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	13	19	15	18	16	14	12	19	19	12		100
	19	10	16	12	12						15.1	
0.05	27	28	14	16	19	5	14	1	3			93.4
											14.1	

FULLY ACTIVE / ACTIVE / SLIGHTLY ACTIVE / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100

SPORONTICIDAL DOSE (S₅₀)S₅₀ :S₉₀ :

Principal Investigator : Professor H. Peters

Department of Medical Protozoology

London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL TESTS
SPORONTOCIDAL ACTIVITY

TABLE 51

COMPOUND : LON 2064 Carboxymetabolite of primaquine

FORMULATION : DISSOLVED / SUSPENDED IN 5 % AQUEOUS SUCROSE SOLUTION

ROUTE : ORAL ADMINISTRATION TO MOSQUITOES IN SUCROSE FEED FOR 7 DAYS

PARASITE : *Plasmodium yoelii* nigeriensis

VERTEBRATE HOST : ♂ TFH MICE

INVERTEBRATE HOST : *Anopheles stephensi*

TOXICITY : TOXIC TO *A. stephensi* AT ~~10~~ % ; NO TOXIC EFFECTS SEEN

EXPERIMENT NUMBER : 4989

DATE : 16.7.86

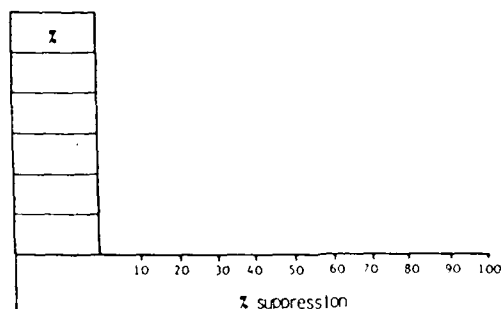
PRELIMINARY TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0	13	19	15	18	16	14	12	19	19	12		100
	19	10	16	12	12						15.1	
0.05	16	6	13	17	4	7	17	3	14	5		67.6
											10.2	

FULLY ACTIVE / ACTIVE / SLIGHTLY ACTIVE / INACTIVE AT 0.05 %

EXTENDED TEST

CONCENTRATION(%)	OOCYST COUNTS D + 7										MEAN	% CONTROL
0												100



SPORONTOCIDAL DOSE (SD)

SD₅₀ :

SD₉₀ :

Principal Investigator : Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

5.7 CROSS RESISTANCE STUDIES

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 52

COMPOUND NAME

OR NUMBER CHLOROQUINE..... PARASITE (SUB)SPECIES *P. berghei*.....

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	92.1 ± 3.2
	1.0	5		-	88.9 ± 5.8
N	3.0	5	1	-	22.1 ± 9.3
CLONE	10.0	5		-	0
	30.0	5		-	0
	Ø	10		23.5	
ED ₅₀ (range) 1.8(1.5 - 2.0)					
ED ₉₀ (range) 3.1(2.6 - 3.6)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	100 ± 1.9
	3.0	5		-	94.0 ± 5.1
RC	10.0	5	1	-	82.3 ± 14.7
CLONE	30.0	5		-	31.7 ± 14.4
	100.0	5		-	22.5 ± 11.3
	Ø	10		6.0	
ED ₅₀ (range) 30.0(6.5 - 210)					
ED ₉₀ (range) 230.0(52.0 - >1000)					
Resistance factor I ₉₀ 74.2					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 53

COMPOUND NAME

OR NUMBER CHLOROQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/10/10

MAXIMUM TOLERATED DOSE (MTD) >30 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	89.7 ± 11.6
	3.0	5		-	24.8 ± 11.6
N	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		22.5	
ED ₅₀ (range) 1.9 (1.3 - 5.0)					
ED ₉₀ (range) 3.3 (2.4 - 9.0)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	100 ± 0.8
	3.0	5		-	44.3 ± 1.8
N/1708	10.0	5	1	-	15.6 ± 7.8
	30.0	5		-	8.0 ± 2.2
	Ø	10		19.7	
ED ₅₀ (range) 5.6 (2.5 - 16)					
ED ₉₀ (range) 10.2 (4.7 - 29)					
Resistance factor I ₉₀ 3.1					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 54

COMPOUND NAME

OR NUMBER

CHLOROQUINE

PARASITE (SUB)SPECIES

P. berghei

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION: SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	92.2 ± 4.2
	3.0	5		-	13.9 ± 5.1
N	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		32.1	
ED ₅₀ (range) 1.8 (1.6 - 2.3)					
ED ₉₀ (range) 3.2 (2.7 - 3.9)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	64.1 ± 16.9
	3.0	5		-	43.2 ± 13.0
MEN	10.0	5	1	-	0.02 ± 0.02
	30.0	5		-	0
	Ø	10		19.0	
ED ₅₀ (range) 1.5 (0.9 - 3.2)					
ED ₉₀ (range) 3.0 (1.8 - 6.2)					
Resistance factor I ₉₀ 0.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 55

COMPOUND NAME

OR NUMBER

CHLOROQUINE

PARASITE (SUB)SPECIES

P. berghei

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >300 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	100 ± 3.3
	3.0	5		-	59.9 ± 2.6
NPN	10.0	5	1	-	36.3 ± 8.5
	30.0	5		-	27.3 ± 10.1
	Ø	10		22.8	
ED ₅₀ (range) 7.3(3.2-21.5)					
ED ₉₀ (range) 25(11-72)					
Resistance factor I ₉₀ 7.8					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 56

COMPOUND NAME

OR NUMBER CHLOROQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >10... MG/KG X 4.

Strain	Daily dose mg/kg DO-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	87.1 ± 14.7
	1.0	5		-	73.1 ± 18.1
P	3.0	5	1	-	5.5 ± 3.2
	10.0	5		-	0.02 ± 0.02
	Ø	10		10.2	
ED ₅₀ (range) 0.9(0.4-2.6)					
ED ₉₀ (range) 2.3(1.1-6.8)					
Resistance factor I ₉₀					
	0.3	5		-	100 ± 2.0
	1.0	5		-	87.3 ± 17.2
B	3.0	5	1	-	45.5 ± 18.9
	10.0	5		-	0.4 ± 0.3
	Ø	10		11.3	
ED ₅₀ (range) 2.3(1.3-3.7)					
ED ₉₀ (range) 4.8(2.8-7.9)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 57

COMPOUND NAME

OR NUMBER CHLOROQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >10 MG/KG X 4

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	100
	1.0	5		-	100 ± 1.2
PYR	3.0	5	1	-	29.4 ± 14.1
	10.0	5		-	0
	Ø	10		20.2	
ED ₅₀ (range) 2.6(1.7-3.0)					
ED ₉₀ (range) 3.5(2.4-4.1)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 58

COMPOUND NAME

OR NUMBER CHLOROQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	75.3 ± 6.3
	1.0	5		-	66.1 ± 14.4
ORA	3.0	5	1	-	18.2 ± 13.7
	10.0	5		-	0.7 ± 0.5
	∅	10		11.9	
ED ₅₀ (range) 0.9(0.4 - 2.4)					
ED ₉₀ (range) 3.6(1.8 - 9.3)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 59

COMPOUND NAME

OR NUMBER **CHLOROQUINE** PARASITE (SUB)SPECIES ***P. yoelii nigeriensis***

FORMULATION **Tween 80/H₂O** ROUTE OF ADMINISTRATION : **SC/HP/PO/IV**

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	69.4 ± 9.0
	1.0	5		-	39.2 ± 14.8
NIG	3.0	5	1	-	24.0 ± 10.2
	10.0	5		-	7.9 ± 3.0
	∅	10		12.1	
ED ₅₀ (range) 0.8(0.3 - 1.5)					
ED ₉₀ (range) 6.7(2.8 - 13.8)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 60

COMPOUND NAME

OR NUMBER Chloroquine PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100 MG/KG X 4.

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	46.6 ± 5.8
	10.0	5		-	24.8 ± 5.1
NS	30.0	5	1	-	17.9 ± 3.0
	100.0	5		-	6.6 ± 2.2
	∅	10		26.2	
ED ₅₀ (range) 2.4(1.1 - 4.0)					
ED ₉₀ (range) 56.0(26.0 - 95.0)					
Resistance factor I ₉₀ 1.0					
	3.0	5		-	78.6 ± 9.9
	10.0	5		-	30.6 ± 4.4
SH	30.0	5	1	-	20.9 ± 9.6
	100.0	5		-	16.1 ± 4.1
	∅	10		23.5	
ED ₅₀ (range) 7.0(2.9 - 21.0)					
ED ₉₀ (range) 80.0(33.0 - 235)					
Resistance factor I ₉₀ 1.4					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDALS)

TABLE 61

COMPOUND NAME

OR NUMBER Chloroquine PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100 MG/KG X 4

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	3.0	5		-	49.1 ± 11.0
	10.0	5		-	21.9 ± 7.7
NS 1708	30.0	5	1	-	15.2 ± 3.4
	100.0	5		-	1.6 ±
	Ø	10		15.4	
ED ₅₀ (range) 4.0(1.8 - 8.0)					
ED ₉₀ (range) 21.5(12.0 - 52.0)					
Resistance factor I ₉₀ 0.4					
	3.0	5		-	70.4 ± 11.9
	10.0	5		-	65.5 ± 9.7
SPN	30.0	5	1	-	35.9 ± 14.3
	100.0	5		-	18.8 ± 8.0
	Ø	10		11.3	
ED ₅₀ (range) 13.0(4.7 - 44.0)					
ED ₉₀ (range) 220(80.0 - 710)					
Resistance factor I ₉₀ 3.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 62

COMPOUND NAME

OR NUMBER CHLOROQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~100 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	3.0	5		-	23.5 ± 8.8
	10.0	5		-	1.5 ± 1.0
N/1100	30.0	5	1	-	0.03 ± 0.02
	100.0	5		-	0
	Ø	10		7.9	
ED ₅₀ (range) 1.5(1.1 - 2.0)					
ED ₉₀ (range) 4.5(3.1 - 6.0)					
Resistance factor I ₉₀ 1.4					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 63

COMPOUND NAME

OR NUMBER CHLOROQUINE PARASITE (SUB)SPECIES P. yoelii sp.

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 100 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	3.0	5		-	94.5 ± 15.2
	10.0	5		-	68.3 ± 17.2
NS/1100	30.0	5	1	-	3.5 ± 1.3
	100.0	5		-	0.7 ± 0.7
	∅	10		2.9	
ED ₅₀ (range) 9.0(4.0 - 25.0)					
ED ₉₀ (range) 27.0(11.5 - 74.0)					
Resistance factor I ₉₀ 0.5					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Paton
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 64

COMPOUND NAME

OR NUMBER ... AMODIAQUINE ... PARASITE (SUB)SPECIES P. berghei ...

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/1P/10/1V

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	100 ± 1.6
	1.0	5		-	97.4 ± 1.7
N	3.0	5	1	-	5.1 ± 2.4
CLONE	10.0	5		-	0
	30.0	5		-	0
	∅	10		23.5	
ED ₅₀ (range) 1.2 (1.5 - 2.1)					
ED ₉₀ (range) 2.6 (2.3 - 3.1)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	89.0 ± 5.4
	3.0	5		-	94.0 ± 4.8
RC	10.0	5	1	-	81.0 ± 13.4
CLONE	30.0	5		-	57.3 ± 8.0
	100.0	5		-	48.7 ± 14.7
	∅	10		6.0	
ED ₅₀ (range) 57 (21.5 - 170)					
ED ₉₀ (range) 420 (160 - >1000)					
Resistance factor I ₉₀ 162					

Principal Investigator: Professor W. Peters
Department of Medical Parasitology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 65

COMPOUND NAME

OR NUMBER AMODIAQUINE..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/1P/10/14

MAXIMUM TOLERATED DOSE (MTD) > 30... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X 100
	1.0	5		-	71.2 ± 14.2
	3.0	5		-	5.8 ± 4.8
N	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		25.7	
ED ₅₀ (range) 1.5(1.1 - 2.1)					
ED ₉₀ (range) 2.8(2.0 - 4.0)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	72.1 ± 10.5
	3.0	5		-	56.7 ± 7.4
N/1708	10.0	5	1	-	0.7 ± 0.3
	30.0	5		-	0.01 ± 0.01
	Ø	10		17.2	
ED ₅₀ (range) 2.2(1.2 - 3.8)					
ED ₉₀ (range) 5.2(2.9 - 9.1)					
Resistance factor I ₉₀ 1.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 66

COMPOUND NAME

OR NUMBER AMODIAQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) 30.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	100 ± 0.7
	3.0	5		-	39.0 ± 17.5
N	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		23.9	
ED ₅₀ (range) <u>2.8(2.3-3.1)</u>					
ED ₉₀ (range) <u>4.0(3.4-4.4)</u>					
Resistance factor I ₉₀ <u>1.0</u>					
	1.0	5		-	97.2 ± 5.1
	3.0	5		-	43.3 ± 17.6
NH	10.0	5	1	-	0.2 ± 0.2
	30.0	5		-	0.02 ± 0.02
	Ø	10		12.0	
ED ₅₀ (range) <u>2.7(1.3-4.8)</u>					
ED ₉₀ (range) <u>5.4(2.6-9.5)</u>					
Resistance factor I ₉₀ <u>1.4</u>					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 67

COMPOUND NAME

OR NUMBER ... AMODIAQUINE PARASITE (SUB)SPECIES *P. berghei*

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >30 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	95.5 ± 9.1
	3.0	5		-	88.2 ± 8.5
Q	10.0	5	1	-	82.8 ± 8.9
	30.0	5		-	76.8 ± 10.1
	Ø	10		9.3	
ED ₅₀ (range) 130(30-670)		I ₅₀ = 46.4			
ED ₉₀ (range) >> 30					
Resistance factor I ₉₀ >>75					
	1.0	5		-	100 ±
	3.0	5		-	75.5 ± 6.4
MEN	10.0	5	1	-	0.01 ± 0.01
	30.0	5		-	0
	Ø	10		24.1	
ED ₅₀ (range) 3.1(2.7-3.9)					
ED ₉₀ (range) 4.5(3.9-5.7)					
Resistance factor I ₉₀ 1.1					

Principal Investigator: Professor W. Peters
Department of Immunoparasitology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 68

COMPOUND NAME

OR NUMBER ... AMODIAQUINE ... PARASITE (SUB)SPECIES P. berghei ...

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC / IP / IV

MAXIMUM TOLERATED DOSE (MTD) > 30 ... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	72.6 ± 4.1
	3.0	5		-	45.4 ± 7.0
NPN	10.0	5	1	-	32.7 ± 2.9
	30.0	5		-	11.2 ± 3.4
	Ø	10		27.8	
ED ₅₀ (range) 3.0 (1.7 - 5.2)					
ED ₉₀ (range) 32 (18 - 57)					
Resistance factor I ₉₀ 8.0					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. D. ...
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 69

COMPOUND NAME

OR NUMBER AMODIAQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/1P/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >10 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	88.2 ± 9.4
	1.0	5		-	44.9 ± 16.8
P	3.0	5	1	-	2.9 ± 2.6
	10.0	5		-	0
	∅	10		10.2	

ED₅₀(range) 0.7(0.3-1.2)

ED₉₀(range) 2.0(0.9-3.3)

Resistance factor I₉₀

	0.3	5		-	100 ± 3.1
	1.0	5		-	91.7 ± 5.8
B	3.0	5	1	-	0.9 ± 0.7
	10.0	5		-	0
	∅	10		11.3	

ED₅₀(range) 1.5(1.3-1.9)

ED₉₀(range) 2.1(1.8-2.7)

Resistance factor I₉₀

Principal Investigator: Professor W. J. L. ...
Department of Medical Parasitology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 70

COMPOUND NAME

OR NUMBER

AMODIAQUINE

PARASITE (SUB)SPECIES *P. berghei*

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/10/10

MAXIMUM TOLERATED DOSE (MTD) >10 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	100
	1.0	5		-	82.0 ± 12.8
PYR	3.0	5	1	-	40.5 ± 16.9
	10.0	5		-	0
	∅	10			
ED ₅₀ (range) 1.9(1.2 - 3.1)					
ED ₉₀ (range) 3.3(2.1 - 5.5)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 71

COMPOUND NAME

OR NUMBER AMODIAQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/40/00/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	100 ± 3.9
	1.0	5		-	34.5 ± 14.2
ORA	3.0	5	1	-	17.3 ± 12.9
	10.0	5		-	0.2 ± 0.2
	∅	10		11.9	
ED ₅₀ (range) 1.1(0.6 - 2.1)					
ED ₉₀ (range) 2.6(1.3 - 4.9)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 72

COMPOUND NAME

OR NUMBER AMODIAQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/10/14

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	3.0	5		-	95.9 ± 4.3
	10.0	5		-	13.9 ± 4.7
N/1100	30.0	5	1	-	1.1 ± 1.0
	100.0	5		-	0.5 ± 0.3
	∅	10		11.1	
ED ₅₀ (range) 7.0(3.3-20.0)					
ED ₉₀ (range) 20.0(9.4-56.0)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 73

COMPOUND NAME

OR NUMBER AMODIAQUINE PARASITE (SUB)SPECIES P.y. nigeriensis

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/00/14

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	77.7 ± 15.9
	1.0	5		-	42.8 ± 7.8
NIG	3.0	5	1	-	40.8 ± 15.4
	10.0	5		-	3.3 ± 1.4
	∅	10		12.1	
ED ₅₀ (range) 1.2(0.5-3.6)					
ED ₉₀ (range) 6.3(2.6-19.0)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 74

COMPOUND NAME

OR NUMBER

Amodiaquine

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80/H₂O

ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD)

>100. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	3.0	5		-	91.8 ± 3.9
	10.0	5		-	9.2 ± 5.5
NS	30.0	5	1	-	0.6 ± 0.4
	100.0	5		-	0.3 ± 0.1
	∅	10		30.4	
ED ₅₀ (range) 6.0(2.6-12.3)					
ED ₉₀ (range) 18.0(7.6-36.0)					
Resistance factor I ₉₀ 1.0					
	3.0	5		-	100 ± 3.3
	10.0	5		-	94.8 ± 5.3
SH	30.0	5	1	-	100 ± 7.5
	100.0	5		-	92.7 ± 6.1
	∅	10		13.5	
ED ₅₀ (range) NA 100					
ED ₉₀ (range) NA 100					
Resistance factor I ₉₀ >>5.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 75

COMPOUND NAME

OR NUMBER

Amodiaquine

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80/H₂O

ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	74.8 ± 9.4
	10.0	5		-	20.0 ± 2.0
NS/1708	30.0	5	1	-	10.6 ± 1.8
	100.0	5		-	4.9 ± 1.8
	Ø	5		19.8	
ED ₅₀ (range) 6.6 (3.3-15.5)					
ED ₉₀ (range) 31.0 (15.0-73.0)					
Resistance factor I ₉₀ 1.7					
	3.0	5		-	72.7 ± 7.4
	10.0	5		-	50.5 ± 7.9
SPN	30.0	5	1	-	39.2 ± 7.5
	100.0	5		-	35.4 ± 5.4
	Ø	10		21.0	
ED ₅₀ (range) 14.5 (6.0-51.0)					
ED ₉₀ (range) 420 (180->100)					
Resistance factor I ₉₀ 23.3					

Interpolated graphically

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 76

COMPOUND NAME

OR NUMBER AMODIAQUINE PARASITE (SUB)SPECIES P. yoelii sp.

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/~~IP~~/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100 MG/KG x 4.

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	3.0	5		-	65.7 ± 17.0
	10.0	5		-	0
NS/1100	30.0	5	1	-	0
	100.0	5		-	0
	∅	10		5.3	
ED ₅₀ (range) 3.3(2.8-3.8)					
ED ₉₀ (range) 4.8(4.0-5.5)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 77

COMPOUND NAME

OR NUMBER PRIMAQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/10/14

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	84.6 ± 6.0
	1.0	5		-	81.5 ± 7.5
N	3.0	5	1	-	51.1 ± 15.2
CLONE	10.0	5		-	0.3 ± 0.3
	30.0	5		-	0
	∅	10		23.5	
ED ₅₀ (range) 2.1(1.0 - 3.9)					
ED ₉₀ (range) 4.8(2.2 - 8.7)					
Resistance factor I ₉₀ 1.0					
	1.0	5			100 ± 0.1
	3.0	5		-	70.3 ± 11.5
RC	10.0	5	1	-	32.4 ± 16.0
CLONE	30.0	5		-	0.3 ± 0.3
	100.0	5		-	0
	∅	10		6.0	
ED ₅₀ (range) 5.5(2.5 - 9.7)					
ED ₉₀ (range) 13.0(5.7 - 22.5)					
Resistance factor I ₉₀ 2.7					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 78

COMPOUND NAME

OR NUMBER PRIMAQUINE..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	86.0 ± 14.1
	3.0	5		-	40.5 ± 17.8
N	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		22.5	
ED ₅₀ (range) 2.2(1.5 - 3.4)					
ED ₉₀ (range) 5.3(3.5 - 8.0)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	92.5 ± 4.5
	3.0	5		-	68.9 ± 9.6
N/1708	10.0	5	1	-	14.4 ± 3.4
	30.0	5		-	0
	Ø	10		19.7	
ED ₅₀ (range) 3.5(1.9 - 6.0)					
ED ₉₀ (range) 7.0(4.0 - 12.5)					
Resistance factor I ₉₀ 1.3					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 79

COMPOUND NAME

OR NUMBER PRIMAQUINE..... PARASITE (SUB)SPECIES P. berghei...

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/H/P/O/H

MAXIMUM TOLERATED DOSE (MTD) > 30.. MG/KG x 4.

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	91.8 ± 4.8
	3.0	5		-	31.3 ± 8.4
N	10.0	5	1	-	1.9 ± 1.0
	30.0	5		-	0
	Ø	10		32.1	
ED ₅₀ (range) 2.3(1.8 - 3.2)					
ED ₉₀ (range) 5.2(4.0 - 7.4)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	79.6 ± 12.5
	3.0	5		-	15.3 ± 6.1
MEN	10.0	5	1	-	0.1 ± 0.1
	30.0	5		-	0
	Ø	10		19.0	
ED ₅₀ (range) 1.6(1.2 - 2.3)					
ED ₉₀ (range) 3.3(2.4 - 4.7)					
Resistance factor I ₉₀ 0.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 80

COMPOUND NAME

OR NUMBER Primaquine..... PARASITE (SUB)SPECIES P. berghei....

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	98.5 ± 9.2
	3.0	5		-	79.8 ± 5.6
NPN	10.0	5	1	-	29.2 ± 9.2
	30.0	5		-	0
	Ø	10		22.8	
ED ₅₀ (range) 4.4(1.8-8.5)					
ED ₉₀ (range) 8.4(3.5-16.2)					
Resistance factor I ₉₀ 1.6					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

TABLE 81

OR NUMBER PRIMAQUINE PARASITE (SUB)SPECIES P. berghii

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/~~IV~~, PO/~~IV~~

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	100 ± 10.9
	1.0	5		-	86.5 ± 17.1
RC	3.0	5	1	-	71.4 ± 13.0
	10.0	5		-	15.1 ± 4.7
	∅	10		3.7	

ED₅₀(range) 3.7(1.6 - 8.5)

ED₉₀(range) 14.8(6.3 - 32.5)

Resistance factor I_{90} ED₅₀ (range)

ED₉₀ (range)

Resistance factor l_{90}

79

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 82

COMPOUND NAME

OR NUMBER PRIMAQUINE..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 60... MG/KG X 4.

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{X100}
P					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					
	0.3	5		-	87.2 ± 7.5
	1.0	5		-	73.5 ± 4.6
B	3.0	5	1	-	71.2 ± 5.8
	10.0	5		-	68.0 ± 19.2
	∅	10		11.3	
ED ₅₀ (range) > 10					
ED ₉₀ (range) > 10					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 83

COMPOUND NAME

OR NUMBER PRIMAQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC / IP / PG / IV

MAXIMUM TOLERATED DOSE (MTD) > 10 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	100 ± 0.4
	1.0	5		-	100 ± 8.0
PYR	3.0	5	1	-	51.8 ± 16.8
	10.0	5		-	34.5 ± 12.7
	∅	10		20.2	
ED ₅₀ (range) <u>4.2(1.7-9.0)</u>					
ED ₉₀ (range) <u>24.0(10.0-50.0)</u>					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. B. B. B.
Department of Medical Microbiology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 84

COMPOUND NAME

OR NUMBER

PRIMAQUINE

PARASITE (SUB)SPECIES

P. berghei

FORMULATION *Tween 80/H₂O* ROUTE OF ADMINISTRATION : SC/~~IP~~/~~PO~~/~~IV~~

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	84.0 ± 6.3
	1.0	5		-	64.5 ± 13.6
ORA	3.0	5	1	-	2.7 ± 0.8
	10.0	5		-	1.5 ± 0.5
	Ø	10		11.9	
ED ₅₀ (range) 0.8(0.4 - 2.0)					
ED ₉₀ (range) 2.6(1.4 - 6.3)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 85

COMPOUND NAME

OR NUMBER PRIMAQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >30 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	70.6 ± 11.4
	3.0	5		-	62.3 ± 11.4
N/1100	10.0	5	1	-	4.8 ± 1.5
	30.0	5		-	0.8 ± 0.5
	∅	10		7.9	
ED ₅₀ (range) 2.3(1.2 - 5.5)					
ED ₉₀ (range) 9.0(4.8 - 21.5)					
Resistance factor I ₉₀ 1.7					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 86

COMPOUND NAME

OR NUMBER **PRIMAQUINE** PARASITE (SUB)SPECIES ***P. yoelii nigeriensis***

FORMULATION **Tween 80 / H₂O** ROUTE OF ADMINISTRATION : **SC/10/PO/IV**

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	57.0 ± 10.3
	1.0	5		-	48.4 ± 16.8
NIG	3.0	5	1	-	23.8 ± 10.8
	10.0	5		-	18.7 ± 5.1
	∅	10		12.1	
ED ₅₀ (range) 0.7(0.2 - 1.6)					
ED ₉₀ (range) 19.5(6.2 - 41.0)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 87

COMPOUND NAME

OR NUMBER

Primaquine

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80/H₂O

ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X 100
	1.0	5		-	88.9 ± 5.0
	3.0	5		-	84.7 ± 5.1
NS	10.0	5	1	-	6.0 ± 3.3
	30.0	5		-	0.08 ± 0.07
	Ø	10		26.2	
ED ₅₀ (range) 3.6(1.9 - 6.7)					
ED ₉₀ (range) 8.4(4.4 - 16.0)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	100 ± 4.5
	3.0	5		-	64.3 ± 14.8
SH	10.0	5	1	-	20.8 ± 6.0
	30.0	5		-	0
	Ø	10		23.5	
ED ₅₀ (range) 5.1(2.9 - 7.4)					
ED ₉₀ (range) 9.2(5.2 - 13.3)					
Resistance factor I ₉₀ 1.1					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 88

COMPOUND NAME

OR NUMBER Primaquine..... PARASITE (SUB)SPECIES P. berghei....

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >30.. MG/KG X 4.

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	97.4 ± 7.7
	3.0	5		-	50.0 ± 16.6
NS 1708	10.0	5	1	-	6.2 ± 1.5
	30.0	5		-	0.5 ± 0.2
	Ø	10		15.4	
ED ₅₀ (range) 3.4 (2.1 - 4.6)					
ED ₉₀ (range) 9.0 (5.4 - 12.0)					
Resistance factor I ₉₀ 1.1					
	1.0	5		-	94.3 ± 4.1
	3.0	5		-	77.2 ± 17.5
SPN	10.0	5	1	-	54.7 ± 7.3
	30.0	5		-	1.1 ± 0.5
	Ø	10		11.3	
ED ₅₀ (range) 5.3 (2.6 - 12.2)					
ED ₉₀ (range) 13.7 (6.8 - 32.0)					
Resistance factor I ₉₀ 1.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 89

COMPOUND NAME

OR NUMBER PRIMAQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	100 ± 9.9
	3.0	5		-	100 ± 11.3
NS/1100	10.0	5	1	-	48.3 ± 18.5
	30.0	5		-	2.8 ± 2.0
	Ø	10		2.9	
ED ₅₀ (range) 11.5(7.7 - 14.8)					
ED ₉₀ (range) 18.4(13.0 - 25.0)					
Resistance factor I ₉₀ 2.2					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 90

COMPOUND NAME

OR NUMBER QUININE HYDROCHLORIDE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/P0/11

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	95.0 ± 4.6
	60.0	5		-	74.7 ± 7.3
N	100.0	5	1	-	42.6 ± 8.7
CLONE	300.0	5		-	0.01 ± 0.01
	600.0	5		-	0
	Ø	10		23.5	
ED ₅₀ (range) 71.0(48.0 - 100)					
ED ₉₀ (range) 118(78.0 - 165)					
Resistance factor I ₉₀ 1.0					
	30.0	5		-	100 ± 6.1
	60.0	5		-	96.7 ± 6.7
RC	100.0	5	1	-	78.8 ± 11.3
CLONE	300.0	5		-	71.3 ± 14.6
	600.0	5		-	66.7 ± 13.0
	Ø	10		6.0	
ED ₅₀ (range) 550(165 - 1500)					
ED ₉₀ (range) 2500(750 - 7000)					
Resistance factor I ₉₀ 21.2					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 91

COMPOUND NAME

OR NUMBER QUININE HYDROCHLORIDE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/AD/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~600 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	76.9 ± 18.6
	100.0	5		-	50.6 ± 14.4
N	300.0	5	1	-	0.9 ± 0.3
	600.0	5		-	0.1 ± 0.1
	Ø	10		22.5	
ED ₅₀ (range) 65(37 - 130)					
ED ₉₀ (range) 170(95 - 340)					
Resistance factor I ₉₀ 1.0					
	30.0	5		-	78.8 ± 2.8
	100.0	5		-	59.7 ± 7.2
N/1708	300.0	5	1	-	0.9 ± 0.2
	600.0	5		-	0
	Ø	10		19.7	
ED ₅₀ (range) 70(47 - 135)					
ED ₉₀ (range) 175(120 - 340)					
Resistance factor I ₉₀ 1.0					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 92

COMPOUND NAME

OR NUMBER QUININE HYDROCHLORIDE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/12/PO/44

MAXIMUM TOLERATED DOSE (MTD) ~ 600 MG/KG X 4

Strain	Daily dose mg/kg DO-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	74.3 ± 9.6
	100.0	5		-	29.0 ± 2.4
N	300.0	5	1	-	0.01 ± 0.01
	600.0	5		-	0
	Ø	10		32.1	
ED ₅₀ (range) 51(34 - 80)					
ED ₉₀ (range) 93(60 - 145)					
Resistance factor I ₉₀ 1.0					
	30.0	5		-	62.8 ± 16.8
	100.0	5		-	28.4 ± 9.2
MEN	300.0	5	1	-	0.6 ± 0.3
	600.0	5		-	0
	Ø	10		19.0	
ED ₅₀ (range) 14(9.0 - 23)					
ED ₉₀ (range) 40(25 - 64)					
Resistance factor I ₉₀ 0.4					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 93

COMPOUND NAME

OR NUMBER QUININE HYDROCHLORIDE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~ 600 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	30.0	5		-	100
	100.0	5		-	89.7 ± 3.5
NPN	300.0	5	1	-	48.7 ± 10.4
	600.0	5		-	22.1 ± 5.3
	Ø	10		22.8	
ED ₅₀ (range) 290(220 - 390)					
ED ₉₀ (range) 900(680 - 1200)					
Resistance factor I ₉₀ 9.7					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 94

COMPOUND NAME

OR NUMBER QUININE HYDROCHLORIDE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	56.6 ± 7.0
	100.0	5		-	37.6 ± 10.6
P	300.0	5	1	-	0.4 ± 0.4
	600.0	5		-	0
	∅	10		10.7	
ED ₅₀ (range) 46.0(17.0 - 96.0)					
ED ₉₀ (range) 140(50.0 - 285)					
Resistance factor I ₉₀					
	30.0	5		-	96.3 ± 3.6
	100.0	5		-	59.7 ± 2.5
B	300.0	5	1	-	0.3 ± 0.2
	600.0	5		-	0
	∅	10		23.3	
ED ₅₀ (range) 90.0(60.0 - 116)					
ED ₉₀ (range) 170(115 - 40)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Petar
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 95

COMPOUND NAME

OR NUMBER QUININE HYDROCHLORIDE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/PO/11

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	75.8 ± 3.8
	100.0	5		-	33.6 ± 12.4
PYR	300.0	5	1	-	0.4 ± 0.2
	600.0	5		-	0
	∅	10		25.0	
ED ₅₀ (range) 55.0(40.0-92.0)					
ED ₉₀ (range) 130(95.0-220)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 96

COMPOUND NAME

OR NUMBER QUININE HYDROCHLORIDE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~600 MG/KG X 4

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X 100
	30.0	5		-	98.0 ± 4.4
	100.0	5		-	79.0 ± 7.1
N/1100	300.0	5	1	-	48.1 ± 19.2
	600.0	5 *		-	38.0
	∅	10		7.9	

ED₅₀(range) 350(146 - 600)

3/5 DIED

ED₉₀(range) 1700(710 - 3000)

INTERPOLATED GRAPHICALLY

Resistance factor I₉₀ 14.7

ED₅₀(range)

ED₉₀(range)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

AD-A195 990

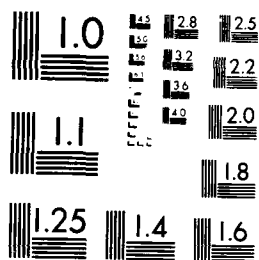
CHEMOTHERAPY OF RODENT MALARIA(U) LONDON SCHOOL OF
HYGIENE AND TROPICAL MEDICINE (ENGLAND) DEPT OF MEDICAL
PROTOZOLOGY W PETERS SEP 86 DARD17-85-C-312

2/3

UNCLASSIFIED

6/5

NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 97

COMPOUND NAME

OR NUMBER

Quinine

PARASITE (SUB)SPECIES

P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/1P/P0/1W

MAXIMUM TOLERATED DOSE (MTD) ~600 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	94.9 ± 4.6
	100.0	5		-	91.6 ± 4.5
NS	300.0	5	1	-	1.5 ± 0.6
	600.0	5		-	0
	∅	10		23.2	
ED ₅₀ (range) 128(76 - 240)					
ED ₉₀ (range) 290(140 - 440)					
Resistance factor I ₉₀					
	30.0	5		-	96.7 ± 3.9
	100.0	5		-	65.4 ± 13.6
SH	300.0	5	1	-	0.9 ± 0.4
	600.0	5		-	0
	∅	10		21.1	
ED ₅₀ (range) 98(64 - 155)					
ED ₉₀ (range) 190(227 - 310)					
Resistance factor I ₉₀ 0.7					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 98

COMPOUND NAME

OR NUMBER Quinine..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/IT/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~600 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X 100
	30.0	5		-	98.9 ± 2.8
	100.0	5		-	48.7 ± 1.4
NS 1708	300.0	5	1	-	1.9 ± 1.1
	600.0	5		-	0.5 ± 0.3
	Ø	10		20.9	
ED ₅₀ (range) 92(64 - 143)					
ED ₉₀ (range) 200(145 - 320)					
Resistance factor I ₉₀ 0.7					
	30.0	5		-	93.8 ± 4.0
	100.0	5		-	42.4 ± 2.2
SPN	300.0	5	1	-	37.4 ± 3.6
	600.0	5		-	35.4 ± 4.3
	Ø	10			
ED ₅₀ (range) 200(74 - 440)					
ED ₉₀ (range) 920(330 - 2000)					
Resistance factor I ₉₀ 3.2					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 99

COMPOUND NAME

OR NUMBER QUININE HYDROCHLORIDE PARASITE (SUB)SPECIES P. yoelii sp.

FORMULATION Tween 80/H₂O... ROUTE OF ADMINISTRATION : SC/IT/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~ 600 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	30.0	5		-	100 ± 15.9
	100.0	5		-	86.2 ± 7.9
NS/1100	300.0	5	1	-	29.3 ± 16.6
	600.0	5		-	17.2 ± 10.1
	∅	10		2.9	
ED ₅₀ (range) 255(135-400)					
ED ₉₀ (range) 600(320-930)					
Resistance factor I ₉₀ 2.1					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 100

COMPOUND NAME

OR NUMBER CINCHONINE HYDROCHLORIDE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/12/PO/44

MAXIMUM TOLERATED DOSE (MTD) >6000 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	30.0	5		-	72.0 ± 4.6
	100.0	5		-	34.9 ± 7.6
N	300.0	5	1	-	0.6 ± 0.3
	600.0	5		-	0
	Ø	10		25.7	
ED ₅₀ (range) 56(37 - 88)					
ED ₉₀ (range) 125(82 - 198)					
Resistance factor I ₉₀ 1.0					
	30.0	5		-	100 ± 3.2
	100.0	5		-	4.3 ± 2.3
N/1708	300.0	5	1	-	0
	600.0	5		-	0
	Ø	10		17.2	
ED ₅₀ (range) 68(45 - 77)					
ED ₉₀ (range) 90(60 - 102)					
Resistance factor I ₉₀ 0.7					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 101

COMPOUND NAME

OR NUMBER CINCHONINE HYDROCHLORIDE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~ 600.0 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	30.0	5		-	56.7 ± 16.9
	100.0	5		-	14.3 ± 5.1
N	300.0	5	1	-	1.1 ± 0.4
	600.0	5		-	0.1 ± 0.1
	Ø	10		24.7	
ED ₅₀ (range) 35(23-51)					
ED ₉₀ (range) 110(70-165)					
Resistance factor I ₉₀ 1.0					
	30.0	5		-	96.4 ± 2.2
	100.0	5		-	70.8 ± 7.5
NH	300.0	5	1	-	4.6 ± 2.2
	600.0	5		-	0.5 ± 0.2
	Ø	10		20.3	
ED ₅₀ (range) 110(57-175)					
ED ₉₀ (range) 290(175-460)					
Resistance factor I ₉₀ 2.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 102

COMPOUND NAME

OR NUMBER CINCHONINE. HYDROCHLORIDE PARASITE (SUB)SPECIES *P. berghei*.....

FORMULATION *Tween 80. / H₂O* ROUTE OF ADMINISTRATION : *SC/TP/PO/IV*

MAXIMUM TOLERATED DOSE (MTD) *~ 600* MG/KG X *4*.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	69.1 ± 17.7
	100.0	5		-	71.6 ± 18.3
Q	300.0	5	1	-	58.4 ± 6.6
	600.0	5		-	50.9 ± 11.4
	Ø	10		6.4	
ED ₅₀ (range) 560(110-1250)					
ED ₉₀ (range) >> 600					
Resistance factor I ₉₀ >>5.5					
	30.0	5		-	20.6 ± 6.5
	100.0	5		-	7.7 ± 5.2
MEN	300.0	5	1	-	0.15 ± 0.15
	600.0	5		-	0.02 ± 0.02
	Ø	10		13.3	
ED ₅₀ (range) 15.5(5.6-29)					
ED ₉₀ (range) 60(22-115)					
Resistance factor I ₉₀ 0.5					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 103

COMPOUND NAME

OR NUMBER CINCHONINE HYDROCHLORIDE PARASITE (SUB)SPECIES *P. berghei*.....

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~.600 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	74.1 ± 7.7
	100.0	5		-	54.6 ± 7.5
NPN	300.0	5	1	-	16.6 ± 7.5
	600.0	5		-	12.2 ± 4.0
	Ø	10		23.8	
ED ₅₀ (range) 88(44-155)					
ED ₉₀ (range) 550(270-980)					
Resistance factor I ₉₀ 5.0					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDALS)

TABLE 104

COMPOUND NAME

OR NUMBER

CINCHONINE HCL

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80/H₂O

ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD)

MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	38.3 ± 6.0
	100.0	5		-	13.3 ± 6.6
P	300.0	5	1	-	0.6 ± 0.4
	600.0	5		-	0.03 ± 0.03
	Ø	10		12.2	

ED₅₀(range) 27.0(19.5-47.0)

ED₉₀(range) 85.0(60.0-150)

Resistance factor I₉₀

	30.0	5		-	25.0 ± 11.6
	100.0	5		-	2.2 ± 1.4
B	300.0	5	1	-	0
	600.0	5		-	0
	Ø	10		24.3	

ED₅₀(range) 20.0(13.0-27.0)

ED₉₀(range) 50.0(33.0-67.0)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 105

COMPOUND NAME

OR NUMBER **CINCHONINE HYDROCHLORIDE** PARASITE (SUB)SPECIES **P. berghei**

FORMULATION **Tween 80/H₂O** ROUTE OF ADMINISTRATION : **SC/TP/PO/IV**

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	46.6 ± 6.2
	100.0	5		-	15.8 ± 7.0
PYR	300.0	5	1	-	0.01 ± 0.01
	600.0	5		-	0
	Ø	10		25.0	
ED ₅₀ (range) 40.0(25.0-70.0)					
ED ₉₀ (range) 91.0(57.0-140)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 106

COMPOUND NAME

OR NUMBER ... CINCHONINE HCl ... PARASITE (SUB)SPECIES ... P. berghei ...

FORMULATION ... Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/14/PO/14

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	72.6 ± 18.9
	100.0	5		-	58.6 ± 22.1
N/1100	300.0	5	1	-	23.4 ± 8.6
	600.0	5		-	8.8 ± 3.3
	∅	10		11.1	

ED₅₀(range) 85.0 (31.0 - 270)

ED₉₀(range) 400 (150 - 1280)

Resistance factor I₉₀

ED₅₀(range)

ED₉₀(range)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 107

COMPOUND NAME

OR NUMBER

Cinchonine

PARASITE (SUB)SPECIES

P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~600 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	93.8 ± 2.8
	100.0	5		-	67.9 ± 3.5
NS	300.0	5	1	-	4.4 ± 2.0
	600.0	5		-	0.1 ± 0.1
	∅	10		30.4	
ED ₅₀ (range) 90(44 - 152)					
ED ₉₀ (range) 220(110 - 370)					
Resistance factor I ₉₀ 1.0					
	30.0	5		-	63.7 ± 11.8
	100.0	5		-	62.2 ± 12.1
SH	300.0	5	1	-	58.5 ± 8.7
	600.0	5		-	50.4 ± 16.9
	∅	10		13.5	
ED ₅₀ (range) 530(40 - 3200)					
ED ₉₀ (range) >> 600					
Resistance factor I ₉₀ > 2.7					

I₅₀ = 5.9

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 108

COMPOUND NAME

OR NUMBER Cinchonine PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : sc/tp/po/iv

MAXIMUM TOLERATED DOSE (MTD) ~ 600 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	30.0	5		-	67.9 ± 6.3
	100.0	5		-	42.1 ± 9.3
NS/1708	300.0	5	1	-	0.7 ± 0.4
	600.0	5		-	0
	Ø	10		19.8	
ED ₅₀ (range) 54(34 - 100)					
ED ₉₀ (range) 155(94 - 285)					
Resistance factor I ₉₀ 0.7					
	30.0	5		-	74.9 ± 5.5
	100.0	5		-	51.6 ± 5.6
SPN	300.0	5	1	-	31.1 ± 8.0
	600.0	5		-	23.8 ± 8.9
	Ø	10		21.0	
ED ₅₀ (range) 118(70 - 240)					
ED ₉₀ (range) 1600(950 - 3250)					
Resistance factor I ₉₀ 7.3					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 109

COMPOUND NAME

OR NUMBER CINCHONINE HYDROCHLORIDE PARASITE (SUB)SPECIES *P. yepeli* sp...

FORMULATION Tween 80/H₂O... ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~ 600 MG/KG X 4.

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	30.0	5		-	93.2 ± 14.1
	100.0	5		-	0.9 ± 0.4
NS/1100	300.0	5	1	-	0
	600.0	5		-	0
	Ø	10		5.3	
ED ₅₀ (range) 46.0(37.0-75.0)					
ED ₉₀ (range) 70.0(54.0-110)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 110

COMPOUND NAME

OR NUMBER ...MEFLOQUINE..... PARASITE (SUB)SPECIES ..*P. berghei*.....

FORMULATION ..Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/1P/P0/1P

MAXIMUM TOLERATED DOSE (MTD) >100. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	58.2 ± 18.3
	10.0	5		-	0
N	30.0	5	1	-	0
	100.0	5		-	0
	Ø	10		25.7	
ED ₅₀ (range) 3.1(2.7-3.7)					
ED ₉₀ (range) 4.6(4.0-5.5)					
Resistance factor I ₉₀ 1.0					
	3.0	5		-	84.1 ± 9.4
	10.0	5		-	0.01 ± 0.01
N/1708	30.0	5	1	-	0
	100.0	5		-	0
	Ø	10		17.2	
ED ₅₀ (range) 3.8(3.5-4.4)					
ED ₉₀ (range) 5.3(4.8-6.0)					
Resistance factor I ₉₀ 1.2					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE III

COMPOUND NAME

OR NUMBER MEFLOQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	91.3 ± 6.1
	3.0	5		-	80.8 ± 2.5
N	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		32.1	
ED ₅₀ (range) 2.7(1.4-4.1)					
ED ₉₀ (range) 4.2(2.1-6.2)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	41.6 ± 10.3
	3.0	5		-	23.2 ± 7.0
MEN	10.0	5	1	-	0.02 ± 0.02
	30.0	5		-	0
	Ø	10		19.0	
ED ₅₀ (range) 1.1(0.7-2.1)					
ED ₉₀ (range) 2.5(1.5-4.6)					
Resistance factor I ₉₀ 0.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 112

COMPOUND NAME

OR NUMBER ..MEFLOQUINE..... PARASITE (SUB)SPECIES *P. berghei*....

FORMULATION ..Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/44/P0/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	37.5 ± 5.1
	3.0	5		-	26.5 ± 3.8
NPN	10.0	5	1	-	10.4 ± 1.3
	30.0	5		-	1.1 ± 0.7
	∅	10		22.8	
ED ₅₀ (range) 1.1(0.5-1.8)					
ED ₉₀ (range) 6.8(3.1-11)					
Resistance factor I ₉₀ 1.6					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCICIDS)

TABLE 113

COMPOUND NAME

OR NUMBER MEFLOQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/14/PO/14

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	80.6 ± 4.5
	10.0	5		-	2.1 ± 0.7
P	30.0	5	1	-	0.8 ± 0.5
	100.0	5		-	0.3 ± 0.2
	∅	10		10.7	
ED ₅₀ (range) 5.5(1.8 - 15.5)					
ED ₉₀ (range) 13.5(4.6 - 38.0)					
Resistance factor I ₉₀					
	3.0	5		-	61.3 ± 19.7
	10.0	5		-	0.9 ± 0.4
B	30.0	5	1	-	0
	100.0	5		-	0
	∅	10		23.3	
ED ₅₀ (range) 3.4(2.7 - 4.4)					
ED ₉₀ (range) 6.0(4.8 - 7.8)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 114

COMPOUND NAME

OR NUMBER MEFLOQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/P0/44

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	83.7 ± 5.2
	10.0	5		-	0.08 ± 0.08
PYR	30.0	5	1	-	0
	100.0	5		-	0
	∅	10		25.0	

ED₅₀(range) 4.0(3.3-4.3)

ED₉₀(range) 5.6(4.7-6.2)

Resistance factor I₉₀

ED₅₀(range)

ED₉₀(range)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 115

COMPOUND NAME

OR NUMBER MEFLOQUINE..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/HP/PO/HV

MAXIMUM TOLERATED DOSE (MTD) >1000.. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	3.0	5		-	97.7 ± 15.6
	10.0	5		-	82.0 ± 10.5
N/1100	30.0	5	1	-	75.7 ± 17.5
	100.0	5		-	47.1 ± 16.0
	∅	10		7.9	
ED ₅₀ (range) 66.0(25.0 - 325)					
ED ₉₀ (range) 540(200 - >1000) INTERPOLATED GRAPHICALLY					
Resistance factor I ₉₀ 138.5					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 116

COMPOUND NAME

OR NUMBER MEFLOQUINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	3.0	5		-	99.8 ± 2.0
	10.0	5		-	0.3 ± 0.3
NS	30.0	5	1	-	0
	100.0	5		-	0
	Ø	10		25.0	
ED ₅₀ (range) 5.5(4.4 - 5.8)					
ED ₉₀ (range) 7.2(5.8 - 7.8)					
Resistance factor I ₉₀					
	3.0	5		-	62.7 ± 8.1
	10.0	5		-	54.8 ± 8.3
SH	30.0	5	1	-	50.0 ± 2.4
	100.0	5		-	44.0 ± 7.8
	Ø	10		24.7	
ED ₅₀ (range) 24.0(5.6 - 120)					
ED ₉₀ (range) >> 100					
Resistance factor I ₉₀ >13.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 117

COMPOUND NAME

OR NUMBER MEFLOQUINE..... PARASITE (SUB)SPECIES P. berghei...

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	100 ± 0.4
	10.0	5		-	0.2 ± 0.2
NS/1708	30.0	5	1	-	0
	100.0	5		-	0
	Ø	10		10.0	
ED ₅₀ (range) 5.9(4.7-6.6)					
ED ₉₀ (range) 7.5(6.0-8.3)					
Resistance factor I ₉₀ 1.0					
	3.0	5		-	52.0 ± 14.7
	10.0	5		-	25.8 ± 9.9
SPN	30.0	5	1	-	2.2 ± 0.5
	100.0	5		-	1.5 ± 1.1
	Ø	10		10.7	
ED ₅₀ (range) 4.1(2.1-8.3)					
ED ₉₀ (range) 20.0(10.0-40.0)					
Resistance factor I ₉₀ 2.8					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 118

COMPOUND NAME

OR NUMBER MEFLOQUINE PARASITE (SUB)SPECIES P. yoelii sp.

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/1P/PO/IV

MAXIMUM TOLERATED DOSE (MTD) ~100 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	100 ± 7.5
	10.0	5		-	71.7 ± 19.2
NS/1100	30.0	5	1	-	53.5 ± 19.2
	100.0	5		-	39.0 ± 22.7
	∅	10		2.9	
ED ₅₀ (range) 53.0 (11.3 - 175)					
ED ₉₀ (range) 640 (135 - >1000)					
Resistance factor I ₉₀ 88.9					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 119

COMPOUND NAME

OR NUMBER HALOFANTRINE..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O... ROUTE OF ADMINISTRATION : SC/10/00/14

MAXIMUM TOLERATED DOSE (MTD) >10.... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	91.4 ± 4.4
	1.0	5		-	48.2 ± 16.5
N	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		25.7	
ED ₅₀ (range) 0.7 (0.5 - 1.1)					
ED ₉₀ (range) 1.1 (0.8 - 1.9)					
Resistance factor I ₉₀ 1.0					
	0.3	5		-	100 ± 3.7
	1.0	5		-	72.3 ± 18.9
N/1708	3.0	5	1	-	0.01 ± 0.01
	10.0	5		-	0
	Ø	10		17.2	
ED ₅₀ (range) 1.0 (0.7 - 1.5)					
ED ₉₀ (range) 1.5 (1.1 - 2.3)					
Resistance factor I ₉₀ 1.4					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 120

COMPOUND NAME

OR NUMBER ..HALOFANTRINE..... PARASITE (SUB)SPECIES ..P. berghei...

FORMULATION ..Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/~~IP~~/PO/~~IV~~

MAXIMUM TOLERATED DOSE (MTD) >..10... MG/KG X 4.

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	91.2 ± 1.7
	1.0	5		-	19.7 ± 7.7
N	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		32.1	
ED ₅₀ (range) 0.6(0.5-0.8)					
ED ₉₀ (range) 1.0(0.8-1.3)					
Resistance factor I ₉₀ 1.0					
	0.3	5		-	36.0 ± 9.1
	1.0	5		-	6.7 ± 3.2
MEN	3.0	5	1	-	0.03 ± 0.02
	10.0	5		-	0
	Ø	10		19.0	
ED ₅₀ (range) 0.3(0.2-0.4)					
ED ₉₀ (range) 0.7(0.5-0.9)					
Resistance factor I ₉₀ 0.7					

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 121

COMPOUND NAME

OR NUMBER HALOFANTRINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >10... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	47.0 ± 4.7
	1.0	5		-	24.3 ± 4.4
NPN	3.0	5	1	-	17.2 ± 2.9
	10.0	5		-	3.5 ± 1.6
	Ø	10		22.8	
ED ₅₀ (range) 0.3(0.2-0.5)					
ED ₉₀ (range) 3.5(2.1-6.3)					
Resistance factor I ₉₀ 3.5					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 122

COMPOUND NAME

OR NUMBER

HALOFANTRINE

PARASITE (SUB)SPECIES

P. berghei

FORMULATION *Tween 80 / H₂O* ROUTE OF ADMINISTRATION : SC/ID/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	77.4 ± 8.1
	1.0	5		-	48.2 ± 12.4
P	3.0	5	1	-	0.4 ± 0.2
	10.0	5		-	0.2 ± 0.2
	30.0	5		-	0
	∅	10		10.7	
ED ₅₀ (range) 0.4(0.2-1.3)					
ED ₉₀ (range) 1.5(0.6-4.6)					
Resistance factor I ₉₀					
	0.3	5		-	95.7 ± 3.3
	1.0	5		-	90.3 ± 3.5
B	3.0	5	1	-	27.8 ± 12.3
	10.0	5		-	0.3 ± 0.2
	30.0	5		-	0
	∅	10		13.3	
ED ₅₀ (range) 2.1(1.5-3.2)					
ED ₉₀ (range) 4.2(3.1-5.2)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 123

COMPOUND NAME

OR: NUMBER HALOFANTRINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	93.6 ± 2.9
	1.0	5		-	80.8 ± 7.1
PYR	3.0	5	1	-	17.4 ± 16.4
	10.0	5		-	0
	∅	10		25.0	
ED ₅₀ (range) 1.1(0.7 - 2.3)					
ED ₉₀ (range) 2.3(1.5 - 5.0)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 124

COMPOUND NAME

OR NUMBER HALOFANTHINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC / IP / PO / IV

MAXIMUM TOLERATED DOSE (MTD) > 30 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	72.2 ± 19.0
	3.0	5		-	45.3 ± 17.3
N/1100	10.0	5	1	-	40.3 ± 10.7
	30.0	5		-	33.2 ± 9.5
	Ø	10		7.9	
ED ₅₀ (range) 4.5(1.0 - 17.5)					
ED ₉₀ (range) 135(20.0 - 520)					
Resistance factor I ₉₀ 122.7					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 126

COMPOUND NAME

OR NUMBER HALOFANTRINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 10.0 MG/KG X 4

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	85.2 ± 5.4
	1.0	5		-	9.1 ± 5.7
NS/1708	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		19.8	
ED ₅₀ (range) 0.5(0.4 - 0.6)					
ED ₉₀ (range) 0.9(0.8 - 1.1)					
Resistance factor I ₉₀ 0.9					
	0.3	5		-	83.4 ± 5.0
	1.0	5		-	49.0 ± 14.4
SPN	3.0	5	1	-	19.1 ± 1.8
	10.0	5		-	1.0 ± 0.9
	Ø	10		10.7	
ED ₅₀ (range) 0.9(0.4 - 1.4)					
ED ₉₀ (range) 3.4(1.5 - 5.2)					
Resistance factor I ₉₀ 3.4					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

TABLE 127

OR NUMBER HALOFANTHINE PARASITE (SUB)SPECIES P. yelii sp.

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) 30 MG/KG X 4

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 128

COMPOUND NAME

OR NUMBER ARTEMISININ PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	92.4 ± 5.8
	1.0	5		-	82.5 ± 5.6
N	3.0	5	1	-	85.6 ± 6.8
CLONE	10.0	5		-	0.7 ± 0.4
	30.0	5		-	0
	Ø	10		23.5	

ED₅₀(range) 1.8(0.6-7.4)

ED₉₀(range) 4.2(1.5-18.0)

Resistance factor I₉₀ 1.0

	0.3	5		-	100 ± 3.8
	1.0	5		-	73.0 ± 9.6
RC	3.0	5	1	-	64.3 ± 10.6
CLONE	10.0	5		-	50.3 ± 12.8
	30.0	5		-	50.0 ± 17.0
	100.0	5		-	38.0 ± 11.5
	Ø	10		6.0	

ED₅₀(range) 16.0(2.8-85.0)

ED₉₀(range) 630(110->1000)

Resistance factor I₉₀ 150

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 129

COMPOUND NAME

OR NUMBER ARTEMISININ..... PARASITE (SUB)SPECIES P. berghei....

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30.. MG/KG X 4.

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	90.4 ± 9.0
	3.0	5		-	52.0 ± 17.6
N	10.0	5	1	-	14.6 ± 9.0
	30.0	5		-	0
	Ø	10		25.7	
ED ₅₀ (range) 3.1(1.7 - 6.1)					
ED ₉₀ (range) 6.7(3.7 - 13.5)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	44.3 ± 11.4
	3.0	5		-	39.8 ± 5.9
N/1708	10.0	5	1	-	12.2 ± 8.7
	30.0	5		-	0.1 ± 0.1
	Ø	10		17.2	
ED ₅₀ (range) 1.4(0.4 - 3.0)					
ED ₉₀ (range) 5.9(1.8 - 17.0)					
Resistance factor I ₉₀ 0.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 130

COMPOUND NAME

OR NUMBER ARTEMISININ..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/14/10/14

MAXIMUM TOLERATED DOSE (MTD) >.30.. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	97.7 ± 1.7
	3.0	5		-	62.0 ± 8.6
N	10.0	5	1	-	17.1 ± 13.8
	30.0	5		-	0.5 ± 0.5
	Ø	10		23.9	
ED ₅₀ (range) 4.1 (3.0-6.6)					
ED ₉₀ (range) 10.5 (7.6-17)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	100 ± 3.2
	3.0	5		-	68.3 ± 7.8
NH	10.0	5	1	-	47.0 ± 17.9
	30.0	5		-	0.03 ± 0.03
	Ø	10		12.0	
ED ₅₀ (range) 5.8 (3.2-12)					
ED ₉₀ (range) 10.5 (6.0-22)					
Resistance factor I ₉₀ 1.0					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 131

COMPOUND NAME

OR NUMBER ARTEMISININ..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/1P/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	88.0 ± 10.3
	3.0	5		-	88.4 ± 6.6
Q	10.0	5	1	-	70.5 ± 8.1
	30.0	5		-	69.9 ± 9.7
	Ø	10		9.3	
ED ₅₀ (range) 70(11 - 400)		I ₅₀ = 17.1			
ED ₉₀ (range) >> 30					
Resistance factor I ₉₀ >> 2.9					
	1.0	5		-	84.1 ± 11.1
	3.0	5		-	70.2 ± 7.0
MEN	10.0	5	1	-	16.0 ± 6.4
	30.0	5		-	0
	Ø	10		24.1	
ED ₅₀ (range) 2.8(1.5 - 6.0)					
ED ₉₀ (range) 6.2(3.2 - 13.5)					
Resistance factor I ₉₀ 0.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 132

COMPOUND NAME

OR NUMBER ARTEMISININ..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Two 80/H₂O.. ROUTE OF ADMINISTRATION : SC/1P/10/14

MAXIMUM TOLERATED DOSE (MTD) > 30... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	81.5 ± 5.9
	3.0	5		-	78.6 ± 4.6
NPN	10.0	5	1	-	54.1 ± 4.4
	30.0	5		-	23.6 ± 7.5
	Ø	10		27.8	
ED ₅₀ (range) <u>7.0(3.7-19)</u>					
ED ₉₀ (range) <u>90(45-230)</u>					
Resistance factor I ₉₀ <u>8.6</u>					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 133

COMPOUND NAME

OR NUMBER ARTEMISININ PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/40/40/40

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	93.3 ± 5.5
	10.0	5		-	22.6 ± 8.0
P	30.0	5	1	-	0.08 ± 0.08
	100.0	5		-	0
	∅	10		12.2	

ED₅₀(range) 6.4(4.7 - 9.0)

ED₉₀(range) 12.0(8.8 - 17.0)

Resistance factor I₉₀

	3.0	5		-	71.7 ± 14.1
	10.0	5		-	8.6 ± 5.1
B	30.0	5	1	-	0
	100.0	5		-	0
	∅	10		25.0	

ED₅₀(range) 4.3(3.2 - 5.7)

ED₉₀(range) 8.2(6.2 - 11.0)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 134

COMPOUND NAME

OR NUMBER ARTEMISININ PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HYPD/LV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	3.0	5		-	59.8 ± 19.2
	10.0	5		-	0.02 ± 0.01
PYR	30.0	5	1	-	0
	100.0	5		-	0
	Ø	10		25.0	
ED ₅₀ (range) 3.3(2.7 - 3.8)					
ED ₉₀ (range) 4.8(4.0 - 5.7)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 135

COMPOUND NAME

OR NUMBER ARTEMISININ PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/10/14

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	74.2 ± 9.0
	10.0	5		-	57.1 ± 6.4
N/1100	30.0	5	1	-	10.6 ± 6.6
	100.0	5		-	0
	∅	10		11.1	

ED₅₀(range) 7.3(3.8 - 15.0)

ED₉₀(range) 17.0(9.2 - 36.0)

Resistance factor I₉₀

ED₅₀(range)

ED₉₀(range)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 136

COMPOUND NAME

OR NUMBER Artemisinin PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >30 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	100 ± 0.1
	3.0	5		-	93.8 ± 4.2
NS	10.0	5	1	-	15.5 ± 8.8
	30.0	5		-	0
	Ø	10		30.4	
ED ₅₀ (range) 5.8(5.0-7.5)					
ED ₉₀ (range) 10.0(8.5-13.2)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	89.3 ± 9.5
	3.0	5		-	76.6 ± 3.0
SH	10.0	5	1	-	73.3 ± 8.1
	30.0	5		-	66.1 ± 8.1
	Ø	10		13.5	
ED ₅₀ (range) >30					
ED ₉₀ (range) >> 30					
Resistance factor I ₉₀ >3.0					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 137

COMPOUND NAME

OR NUMBER Artemisinin PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >30 MG/KG X 4

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	91.6 ± 7.5
	3.0	5		-	54.9 ± 7.8
NS/1708	10.0	5	1	-	6.5 ± 4.8
	30.0	5		-	0.1 ± 0.1
	∅	10		19.8	
ED ₅₀ (range) 3.0(1.8-4.0)					
ED ₉₀ (range) 7.8(4.6-10.5)					
Resistance factor I ₉₀ 0.8					
	1.0	5		-	86.2 ± 2.1
	3.0	5		-	49.3 ± 4.3
SPN	10.0	5	1	-	27.8 ± 2.2
	30.0	5		-	9.2 ± 1.2
	∅	10		21.0	
ED ₅₀ (range) 3.5(2.4-5.3)					
ED ₉₀ (range) 20.5(13.6-31.0)					
Resistance factor I ₉₀ 2.1					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 138

COMPOUND NAME

OR NUMBER **ARTEMISININ**..... PARASITE (SUB)SPECIES **P. yoelii sp.**

FORMULATION **Tween 80/H₂O**.. ROUTE OF ADMINISTRATION : **SC/HP/PO/IV**

MAXIMUM TOLERATED DOSE (MTD) **> 30**... MG/KG X **4**..

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	1.0	5	5	-	0.4 ± 0.4
	3.0	5		-	0
NS/1100	10.0	5	1	-	0
	30.0	5		-	0
	∅	10		5.3	
ED ₅₀ (range) < 1.0					
ED ₅₀ (range) < 1.0					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 139

COMPOUND NAME

OR NUMBER PYRIMETHAMINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X 100
	0.03	5		-	81.8 ± 7.8
	0.1	5		-	18.0 ± 16.3
N	0.3	5	1	-	0.3 ± 0.2
CLONE	1.0	5		-	0
	3.0	5		-	0
	∅	10		23.5	
ED ₅₀ (range) 0.05(0.04 - 0.07)					
ED ₉₀ (range) 0.12(0.09 - 0.17)					
Resistance factor I ₉₀ 1.0					
	0.03	5		-	49.3 ± 19.2
	0.1	5		-	11.0 ± 3.8
RC	0.3	5	1	-	4.3 ± 3.5
CLONE	1.0	5		-	0.7 ± 0.6
	3.0	5		-	0.03 ± 0.03
	∅	10		6.0	
ED ₅₀ (range) 0.03(0.01 - 0.05)					
ED ₉₀ (range) 0.16(0.07 - 0.28)					
Resistance factor I ₉₀ 1.3					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 140

COMPOUND NAME

OR NUMBER PYRIMETHAMINE..... PARASITE (SUB)SPECIES *P. berghei*.....

FORMULATION Tween 80 / H₂O. ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 3.0. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	14.9 ± 10.2
	0.3	5		-	3.8 ± 2.2
N	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10		22.5	

ED₅₀(range) 0.05(0.02-0.08)

ED₉₀(range) 0.13(0.07-0.24)

Resistance factor I₉₀ 1.0

	0.1	5		-	0.7 ± 0.6
	0.3	5		-	0.1 ± 0.1
N/1708	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10		19.7	

ED₅₀(range) 0.001(<0.001-0.002)

ED₉₀(range) 0.012(0.004-0.018)

Resistance factor I₉₀ 0.09

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 141

COMPOUND NAME

OR NUMBER .PYRIMETHAMINE..... PARASITE (SUB)SPECIES .P. berghei.....

FORMULATION ..Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) .>3.0. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	0.1	5		-	28.5 ± 12.3
	0.3	5		-	0.7 ± 0.6
N	1.0	5	1	-	0
	3.0	5		-	0
	Ø	5		33.0	
ED ₅₀ (range) 0.07(0.05-0.09)					
ED ₉₀ (range) 0.15(0.1-0.2)					
Resistance factor I ₉₀ 1.0					
	0.1	5		-	64.5 ± 9.2
	0.3	5		-	15.0 ± 13.0
NH	1.0	5	1	-	0
	3.0	5		-	0
	Ø	5		20.4	
ED ₅₀ (range) 0.13(0.1-0.22)					
ED ₉₀ (range) 0.26(0.2-0.43)					
Resistance factor I ₉₀ 1.7					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 142

COMPOUND NAME

OR NUMBER PRIMETHAMINE..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O... ROUTE OF ADMINISTRATION : SG/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	43.1 ± 12.8
	0.3	5		-	6.4 ± 3.8
NPN	1.0	5	1	-	0
	3.0	5		-	0
	∅	5		22.3	
ED ₅₀ (range) 0.1(0.07-0.14)					
ED ₉₀ (range) 0.21(0.15-0.3)					
Resistance factor I ₉₀ 1.4					
	0.1	5		-	62.4 ± 2.4
	0.3	5		-	24.7 ± 5.9
MEN	1.0	5	1	-	0.4 ± 0.2
	3.0	5		-	0
	∅	5		15.9	
ED ₅₀ (range) 0.15(0.1-0.2)					
ED ₉₀ (range) 0.4(0.28-0.55)					
Resistance factor I ₉₀ 2.7					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

TABLE 143

OR NUMBER ..PYRIMETHAMINE..... PARASITE (SUB)SPECIES ..P. berghei.....

FORMULATION .. Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >30 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% $\times 100$
	0.1	5		-	1.7 ± 0.9
	0.3	5		-	0.3 ± 0.3
Q	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10		6.1	
ED ₅₀ (range) 0.005(0.002 - 0.008)		Interpolated graphically			
ED ₉₀ (range) 0.03(0.01 - 0.05)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
FD ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 144

COMPOUND NAME

OR NUMBER PYRIMETHAMINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	0.03	5		-	75.8 ± 14.3
	0.1	5		-	38.2 ± 19.2
P	0.3	5	1	-	1.6 ± 1.3
	1.0	5		-	0.4 ± 0.3
	∅	10		11.4	

ED₅₀(range) 0.05(0.02-0.12)

ED₉₀(range) 0.17(0.06-0.44)

Resistance factor I₉₀

	0.03	5		-	91.2 ± 4.6
	0.1	5		-	84.6 ± 3.6
B	0.3	5	1	-	80.2 ± 4.1
	1.0	5		-	65.9 ± 14.8
	∅	10		24.8	

ED₅₀(range)

ED₉₀(range)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 145

COMPOUND NAME

OR NUMBER PYRIMETHAMINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.03	5		-	100 ± 4.2
	0.1	5		-	79.3 ± 7.1
PYR	0.3	5	1	-	81.6 ± 9.2
	1.0	5		-	72.5 ± 11.1
	∅	10		23.7	
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 146

COMPOUND NAME

OR NUMBER PYRIMETHAMINE..... PARASITE (SUB)SPECIES P. berghei....

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.03	5		-	43.2 ± 15.9
	0.1	5		-	0.02 ± 0.02
N/1100	0.3	5	1	-	0
	1.0	5		-	0
	∅	10		11.1	
ED ₅₀ (range) 0.03(0.02 - 0.04)					
ED ₉₀ (range) 0.04(0.03 - 0.05)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 147

COMPOUND NAME

OR NUMBER Pyrimethamine PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.03	5		-	88.5 ± 4.5
	0.1	5		-	46.4 ± 15.4
NS	0.3	5	1	-	0
	1.0	5		-	0
	Ø	10		26.2	
ED ₅₀ (range) 0.07(0.04-0.11)					
ED ₉₀ (range) 0.11(0.07-0.19)					
Resistance factor I ₉₀ 1.0					
	0.01	5		-	86.8 ± 5.3
	0.03	5		-	51.2 ± 10.0
SH	0.1	5	2	-	9.6 ± 6.5
	0.3	5		-	1.3 ± 1.1
	1.0	5		-	0
	Ø	20		22.1	
ED ₅₀ (range) 0.03(0.02-0.04)					
ED ₉₀ (range) 0.11(0.06-0.15)					
Resistance factor I ₉₀ 1.0					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 148

COMPOUND NAME

OR NUMBER Pyrimethamine PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.01	5		-	77.9 ± 8.6
	0.03	5		-	68.1 ± 7.3
NS 1708	0.1	5	2	-	15.5 ± 8.7
	0.3	5		-	0.3 ± 0.1
	1.0	5		-	0
	∅	20		18.6	
ED ₅₀ (range) 0.03(0.01-0.06)					
ED ₉₀ (range) 0.10(0.05-0.19)					
Resistance factor I ₉₀ 0.9					
	0.01	5		-	95.7 ± 11.7
	0.03	5		-	72.0 ± 13.2
SPN	0.1	5	2	-	5.9 ± 2.7
	0.3	5		-	0
	∅	20		11.5	
ED ₅₀ (range) 0.03(0.02-0.05)					
ED ₉₀ (range) 0.07(0.04-0.12)					
Resistance factor I ₉₀ 0.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 149

COMPOUND NAME

OR NUMBER PYRIMETHAMINE PARASITE (SUB)SPECIES *P. berghei*

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PRZ Control PRZ ^{x100}
	0.3	5		-	53.7 ± 12.0
	1.0	5		-	0.2 ± 0.2
ORA	3.0	5	1	-	0.05 ± 0.03
	10.0	5		-	0
	∅	10		12.3	
ED ₅₀ (range) 0.2(0.1 - 0.4)					
ED ₉₀ (range) 0.5(0.2 - 1.0)					
Resistance factor I ₉₀					
	0.03	5		-	23.7 ± 12.1
	0.1	5		-	2.7 ± 2.5
RC	0.3	5	1	-	1.1 ± 1.0
	1.0	5		-	0
	∅	10		3.8	
ED ₅₀ (range) 0.009(0.002 - 0.02)					
ED ₉₀ (range) 0.05(0.01 - 0.10)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

TABLE 150

OR NUMBER PYRIMETHAMINE PARASITE (SUB)SPECIES *P. y. nigeriensis*.

FORMULATION Tween 80/H₂O... ROUTE OF ADMINISTRATION : SC/IP/PO/IV

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% $\times 100$				
	0.03	5		-	69.6 $\pm$ 6.2				
	0.1	5		-	16.0 $\pm$ 6.9				
NIG	0.3	5	1	-	1.6 $\pm$ 1.2				
	1.0	5		-	0.4 $\pm$ 0.3				
	$\emptyset$	10		20.4					
ED ₅₀ (range) 0.04(0.01-0.06)									
ED ₉₀ (range) 0.16(0.06-0.27)									
Resistance factor I ₉₀									
ED ₅₀ (range)									
ED ₉₀ (range)									
Resistance factor I ₉₀									

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 151

COMPOUND NAME

OR NUMBER SULFADOXINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/10/PO/14

MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.1	5		-	86.2 ± 3.6
	0.3	5		-	96.3 ± 2.1
N	1.0	5	1	-	80.7 ± 15.9
	3.0	5		-	17.0 ± 16.1
	Ø	10		22.5	
ED ₅₀ (range) 1.5(0.6 - 4.0)					
ED ₉₀ (range) 4.4(1.6 - 11.3)					
Resistance factor I ₉₀ 1.0					
	0.1	5		-	25.2 ± 8.1
	0.3	5		-	0.1 ± 0.1
N/1708	1.0	5	1	-	0.01 ± 0.01
	3.0	5		-	0
	Ø	10		19.7	
ED ₅₀ (range) 0.4(0.2 - 0.7)					
ED ₉₀ (range) 1.2(0.5 - 1.8)					
Resistance factor I ₉₀ 0.3					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 152

COMPOUND NAME

OR NUMBER SULFADOXINE..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >3.0.. MG/KG X 4..

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	100 ± 0.1
	0.3	5		-	82.0 ± 3.2
N	1.0	5	1	-	55.5 ± 14.0
	3.0	5		-	18.4 ± 6.2
	Ø	10		39.1	
ED ₅₀ (range) 1.0(0.6 - 1.8)					
ED ₉₀ (range) 5.1(3.6 - 9.0)					
Resistance factor I ₉₀ 1.0					
	0.1	5		-	100 ± 4.1
	0.3	5		-	99.4 ± 3.7
NH	1.0	5	1	-	60.2 ± 8.4
	3.0	5		-	8.6 ± 5.2
	Ø	10		25.1	
ED ₅₀ (range) 1.3(0.8 - 2.5)					
ED ₉₀ (range) 2.7(1.7 - 5.4)					
Resistance factor I ₉₀ 0.5					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 153

COMPOUND NAME

OR NUMBER ... SULFADOXINE ... PARASITE (SUB)SPECIES ... P. berghei ...

FORMULATION Tween 80/H₂O ... ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >3.0 ... MG/KG X 4 .

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	0.01	5		-	100 ± 1.7
	0.03	5		-	85.6 ± 13.3
NPN	0.1	5	2	-	10.8 ± 8.9
	0.3	5		-	0
	∅	20		22.4	

ED₅₀(range) 0.05(0.04 - 0.07)

ED₉₀(range) 0.1(0.7 - 1.2)

Resistance factor I₉₀ 0.02

	0.03	5		-	100 ± 16.3
	0.1	5		-	26.0 ± 16.4
Q	0.3	5	2	-	0.04 ± 0.04
	1.0	5		-	0
	∅	20		5.4	

ED₅₀(range) 0.09(0.06 - 0.11)

ED₉₀(range) 0.13(0.1 - 0.17)

Resistance factor I₉₀ 0.02

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 154

COMPOUND NAME

OR NUMBER SULFADOXINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		—	26.0 ± 16.3
	0.3	5		—	0.04 ± 0.04
Q	1.0	5	1	—	0
	3.0	5		—	0
	Ø	10		4.7	
ED ₅₀ (range) 0.08(0.06-0.09)					
ED ₉₀ (range) 0.13(0.09-0.16)					
Resistance factor I ₉₀ 0.03					
	0.1	5		—	85.5 ± 5.5
	0.3	5		—	18.7 ± 11.3
MEN	1.0	5	1	—	0.02 ± 0.02
	3.0	5		—	0
	Ø	10		11.9	
ED ₅₀ (range) 0.18(0.12-0.23)					
ED ₉₀ (range) 0.34(0.22-0.44)					
Resistance factor I ₉₀ 0.07					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 155

COMPOUND NAME

OR NUMBER SULFADOXINE..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80 / H₂O. ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >3.0 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.1	5		-	10.8 ± 8.9
	0.3	5		-	0
NPN	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10		21.9	
ED ₅₀ (range) 0.06 (0.04 - 0.07)					
ED ₉₀ (range) 0.1 (0.07 - 0.12)					
Resistance factor I ₉₀ 0.02					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 156

COMPOUND NAME

OR NUMBER SULFADOXINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.03	5		-	93.9 ± 6.1
	0.1	5		-	76.3 ± 14.0
P	0.3	5	1	-	71.4 ± 6.9
	1.0	5		-	0.5 ± 0.3
	∅	10		11.4	
ED ₅₀ (range) 0.16(0.06 - 0.5)					
ED ₉₀ (range) 0.39(0.16 - 1.25)					
Resistance factor I ₉₀					
	0.03	5		-	89.0 ± 6.2
	0.1	5		-	92.2 ± 5.3
B	0.3	5	1	-	92.6 ± 2.7
	1.0	5		-	1.3 ± 1.1
	∅	10		24.8	
ED ₅₀ (range) 0.52(0.41 - 0.58)					
ED ₉₀ (range) 0.71(0.56 - 0.8)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLI 157

COMPOUND NAME

OR NUMBER SULFADOXINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x100
	0.03	5		-	98.1 ± 2.8
	0.1	5		-	92.7 ± 3.2
PYR	0.3	5	1	-	55.0 ± 19.0
	1.0	5		-	28.8 ± 14.5
	∅	10		23.7	
ED ₅₀ (range) 0.43(0.21 - 0.72)					
ED ₉₀ (range) 1.9(0.9 - 3.2)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 158

COMPOUND NAME

OR NUMBER SULFADOXINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X 100
	0.03	5		-	21.3 ± 6.6
	0.1	5		-	0.4 ± 0.3
N/1100	0.3	5	1	-	0
	1.0	5		-	0
	∅	10		11.1	
ED ₅₀ (range) 0.02(0.01 - 0.02)					
ED ₉₀ (range) 0.04(0.03 - 0.05)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 159

COMPOUND NAME

OR NUMBER

Sulfadoxine

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80/H₂O

ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4.

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	0.1	5		-	64.5 ± 17.5
	0.3	5		-	9.4 ± 3.6
NS	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10		23.2	
ED ₅₀ (range) 0.13(0.1 - 0.16)					
ED ₉₀ (range) 0.26(0.19 - 0.33)					
Resistance factor I ₉₀ 1.0					
	0.1	5		-	80.0 ± 11.1
	0.3	5		-	0.8 ± 0.5
SH	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10			
ED ₅₀ (range) 0.13(0.12 - 0.16)					
ED ₉₀ (range) 0.21(0.18 - 0.19)					
Resistance factor I ₉₀ 0.8					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 160

COMPOUND NAME

OR NUMBER Sulfadoxine PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.01	5		-	93.3 ± 3.3
	0.03	5		-	86.4 ± 2.1
NS 1708	0.1	5	2	-	31.8 ± 10.9
	0.3	5		-	2.3 ± 1.9
	1.0	5		-	0.01 ± 0.01
	3.0	5		-	0
	∅	20		21.3	
ED ₅₀ (range) 0.05(0.03-0.09)					
ED ₉₀ (range) 0.14(0.07-0.23)					
Resistance factor I ₉₀ 0.5					
	0.01	5		-	83.2 ± 7.7
	0.03	5		-	76.8 ± 7.2
SPN	0.1	5	2	-	24.0 ± 8.8
	0.3	5		-	0.01 ± 0.01
	1.0	5		-	0
	∅	20		21.0	
ED ₅₀ (range) 0.04(0.01-0.08)					
ED ₉₀ (range) 0.08(0.03-0.15)					
Resistance factor I ₉₀ 0.3					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 161

COMPOUND NAME

OR NUMBER ... **SULFADOXINE** ... PARASITE (SUB)SPECIES **P. berghei** ...

FORMULATION **Tween 80/H₂O** ROUTE OF ADMINISTRATION : **SC/ID/PO/IV**

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg. D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	67.5 ± 12.3
	10.0	5		-	52.8 ± 9.1
ORA	30.0	5	1	-	12.0 ± 6.1
	100.0	5		-	0.5 ± 0.3
	Ø	10		12.3	
ED ₅₀ (range) 7.0(3.1 - 13.0)					
ED ₉₀ (range) 29.0(13.0 - 54.0)					
Resistance factor I ₉₀					
	0.03	5		-	70.0 ± 17.7
	0.1	5		-	57.9 ± 18.2
RC	0.3	5	1	-	54.7 ± 15.7
	1.0	5		-	4.8 ± 3.0
	Ø	10		3.8	
ED ₅₀ (range) 0.13(0.03 - 0.56)					
ED ₉₀ (range) 0.62(0.15 - 2.5)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 162

COMPOUND NAME

OR NUMBER SULFADOXINE PARASITE (SUB)SPECIES P.y. nigeriensis

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/IT/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	0.03	5		-	75.4 ± 8.0
	0.1	5		-	32.4 ± 8.4
NIG	0.3	5	1	-	10.1 ± 9.4
	1.0	5		-	0.02 ± 0.01
	∅	10		20.4	
ED ₅₀ (range) 0.07(0.04 - 0.16)					
ED ₉₀ (range) 0.18(0.1 - 0.4)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 163

COMPOUND NAME (1:3)
OR NUMBER PYRIMETHAMINE: SULFADOXINE PARASITE (SUB)SPECIES *P. berghei*
FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION: SC/IP/PO/IV
MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.1	5		-	79.0 ± 8.3
	0.3	5		-	12.4 ± 11.9
N	1.0	5	1	-	0
	3.0	5		-	0
	Ø	5		39.1	
ED ₅₀ (range) 0.16(0.1 - 0.2)					
ED ₉₀ (range) 0.32(0.14 - 0.4)					
Resistance factor I ₉₀ 1.0					
	0.1	5		-	48.0 ± 15.1
	0.3	5		-	0.25 ± 0.15
NH	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10		25.1	
ED ₅₀ (range) 0.1(0.08 - 0.11)					
ED ₉₀ (range) 0.16(0.13 - 0.19)					
Resistance factor I ₉₀ 0.5					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 164

COMPOUND NAME (1:3)
OR NUMBER PYRIMETHAMINE...SULFADOXINE PARASITE (SUB)SPECIES *P. berghei*....
FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/IP/~~PO~~IV
MAXIMUM TOLERATED DOSE (MTD) > 3.0. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.003	5		-	95.6 ± 4.1
	0.01	5		-	76.1 ± 7.5
NPN	0.03	5	2	-	70.2 ± 13.5
	0.1	5		-	0
	∅	20		22.4	
ED ₅₀ (range) 0.01(0.005 - 0.05)					
ED ₉₀ (range) 0.03(0.01 - 0.1)					
Resistance factor I ₉₀ 0.09					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD S⁺ ZONTOCIDES)

TABLE 165

COMPOUND NAME (1:3)

OR NUMBER PYRIMETHAMINE : SULFADOXINE. PARASITE (SUB)SPECIES *P. berghei*

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/IP/~~PO/IV~~

MAXIMUM TOLERATED DOSE (MTD) > 3.0. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	0.5 ± 0.4
	0.3	5		-	0.1 ± 0.04
Q	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10		4.7	
ED ₅₀ (range) 0.001(0.001 - 0.002)					
ED ₉₀ (range) 0.01(0.004 - 0.02)					
Resistance factor I ₉₀ 0.03					
	0.1	5		-	4.4 ± 3.3
	0.3	5		-	0.2 ± 0.2
MEN	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10		11.9	
ED ₅₀ (range) 0.02(0.01 - 0.03)					
ED ₉₀ (range) 0.07(0.04 - 0.09)					
Resistance factor I ₉₀ 0.2					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 166

COMPOUND NAME (1:3)

OR NUMBER PYRIMETHAMINE: SULFADOXINE PARASITE (SUB)SPECIES *P. berghei*.....

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 3.0. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	88.7 ± 8.1
	0.3	5		-	48.0 ± 17.7
N	1.0	5	1	-	0.1 ± 0.1
	3.0	5		-	0
	Ø	10		22.5	
ED ₅₀ (range) 0.2(0.16-0.37)					
ED ₉₀ (range) 0.42(0.31-0.74)					
Resistance factor I ₉₀ 1.0					
	0.1	5		-	10.1 ± 3.0
	0.3	5		-	0
N/1708	1.0	5	1	-	0
	3.0	5		-	0
	Ø	10		19.7	
ED ₅₀ (range) 0.055(0.05-0.06)					
ED ₉₀ (range) 0.1(0.09-0.11)					
Resistance factor I ₉₀ 0.2					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 167

COMPOUND NAME

OR NUMBER PYRIMETHAMINE : SULFADOXINE (1:3) PARASITE (SUB)SPECIES ... *P. berghei* ...

FORMULATION Tween 80 / H₂O. ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.01	5		-	96.7 ± 5.6
	0.03	5		-	83.5 ± 5.2
P	0.1	5	1	-	82.2 ± 8.1
	0.3	5		-	68.4 ± 9.3
	∅	10		11.4	
ED ₅₀ (range) 0.2(0.06 - 0.8)					
ED ₉₀ (range) 1.1(0.4 - 4.5)					
Resistance factor I ₉₀					
	0.01	5		-	88.0 ± 3.1
	0.03	5		-	82.7 ± 1.1
B	0.1	5	1	-	81.8 ± 7.2
	0.3	5		-	81.3 ± 8.6
	∅	10		24.8	
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 168

COMPOUND NAME

OR NUMBER PYRIMETHAMINE: SULFADOXINE (1:3) PARASITE (SUB)SPECIES *P. berghei*.....

FORMULATION *Twain 80/H₂O* ROUTE OF ADMINISTRATION : *SC/IP/PO/IV*

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	0.01	5		-	99.0 ± 4.7
	0.03	5		-	96.5 ± 3.8
PYR	0.1	5	1	-	92.3 ± 3.6
	0.3	5		-	69.4 ± 16.4
	∅	10		23.7	
ED ₅₀ (range) 0.6(0.4 - 0.9)					
ED ₉₀ (range) 3.0(2.3 - 4.7)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 169

COMPOUND NAME

OR NUMBER PYRIMETHAMINE: SULFADOXINE(1:3) PARASITE (SUB)SPECIES *P. berghei*

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.01	5		-	92.8 ± 12.5
	0.03	5		-	69.2 ± 19.2
N/1100	0.1	5	1	-	54.4 ± 15.7
	0.3	5		-	0
	∅	10		11.1	
ED ₅₀ (range) 0.04(0.01 - 0.13)					
ED ₉₀ (range) 0.08(0.03 - 0.25)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 170

COMPOUND NAME Pyrimethamine +
OR NUMBER Sulfadoxine (1:3) PARASITE (SUB)SPECIES P. berghei
FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : sc/IP/PO/IV
MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.03	5		-	79.6 ± 8.6
	0.1	5		-	37.9 ± 18.4
NS	0.3	5	2	-	0
	1.0	5		-	0
	∅	20		23.2	
ED ₅₀ (range) 0.06(0.04-0.1)					
ED ₉₀ (range) 0.1(0.06-0.19)					
Resistance factor I ₉₀ 1.0					
	0.1	5		-	85.9 ± 16.6
	0.3	5		-	0.1 ± 0.1
SH	1.0	5	1	-	0
	3.0	5		-	0
	∅	10		21.1	
ED ₅₀ (range) 0.13(0.11-0.18)					
ED ₉₀ (range) 0.19(0.15-0.25)					
Resistance factor I ₉₀ 1.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 171

COMPOUND NAME Pyrimethamine +
OR NUMBER Sulfadoxine (1:3) PARASITE (SUB)SPECIES P. berghei
FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IP/PO/IV
MAXIMUM TOLERATED DOSE (MTD) > 3.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X 100
	0.01	5		-	95.8 ± 2.7
	0.03	5		-	80.6 ± 6.3
NS 1708	0.1	5	2	-	26.7 ± 8.5
	0.3	5		-	0.1 ± 0.1
	1.0	5		-	0
	∅	20		21.3	
ED ₅₀ (range) 0.05(0.02-0.08)					
ED ₉₀ (range) 0.1(0.05-0.17)					
Resistance factor I ₉₀ 1.0					
	0.01	5		-	100 ± 0.7
	0.03	5		-	85.5 ± 11.8
SPN	0.1	5	2	-	2.8 ± 0.8
	0.3	5		-	0.01 ± 0.01
	1.0	5		-	0
	∅	20		21.0	
ED ₅₀ (range) 0.05(0.04-0.06)					
ED ₉₀ (range) 0.08(0.06-0.09)					
Resistance factor I ₉₀ 0.8					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 172

COMPOUND NAME **1:3**
OR NUMBER **PRIMETHAMINE: SULFADOXINE** PARASITE (SUB)SPECIES **P. berghei**
FORMULATION **Twren 80/H₂O** ROUTE OF ADMINISTRATION: **SC/IP/PO/IV**
MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	63.5 ± 3.8
	0.3	5		-	41.0 ± 4.6
ORA	1.0	5	1	-	1.3 ± 1.2
	3.0	5		-	0.02 ± 0.02
	∅	10		12.3	
ED ₅₀ (range) 0.18(0.11 - 0.28)					
ED ₉₀ (range) 0.48(0.3 - 0.74)					
Resistance factor I ₉₀					
	0.01	5		-	72.6 ± 18.7
	0.03	5		-	25.8 ± 10.6
RC	0.1	5	1	-	20.0 ± 5.6
	0.3	5		-	0
	∅	10		3.8	
ED ₅₀ (range) 0.03(0.01 - 0.06)					
ED ₉₀ (range) 0.06(0.02 - 0.15)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDIS)

TABLE 173

COMPOUND NAME

OR NUMBER **PRIMETHAMINE: SULFADOXINE(1:3)** PARASITE (SUB)SPECIES **P.y.nigeriensis**

FORMULATION **Tween 80/H₂O**... ROUTE OF ADMINISTRATION : ~~SC~~ **IP/IV**

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	0.01	5		-	52.5 ± 3.0
	0.03	5		-	46.4 ± 8.0
NIG	0.1	5	1	-	0.8 ± 0.4
	0.3	5		-	0
	Ø	10		20.4	

ED₅₀(range) **0.02(0.01 - 0.03)**

ED₉₀(range) **0.04(0.02 - 0.08)**

Resistance factor I₉₀

ED₅₀(range)

ED₉₀(range)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 174

COMPOUND NAME

OR NUMBER CYCLOGUANIL PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/ID/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	84.4 ± 6.8
	0.3	5		-	76.0 ± 10.3
N	1.0	5	1	-	73.6 ± 8.2
CLONE	3.0	5		-	54.9 ± 8.3
	10.0	5		-	0.9 ± 0.8
	Ø	10		23.5	
ED ₅₀ (range) 0.9(0.2-4.0)					
ED ₉₀ (range) 3.3(0.8-15.0)					
Resistance factor I ₉₀ 1.0					
	0.1	5		-	61.7 ± 6.4
	0.3	5		-	38.7 ± 2.9
RC	1.0	5	1	-	26.0 ± 4.2
CLONE	3.0	5		-	9.7 ± 4.8
	10.0	5		-	4.3 ± 2.6
	Ø	10		6.0	
ED ₅₀ (range) 0.2(0.1-0.4)					
ED ₉₀ (range) 3.1(1.3-6.0)					
Resistance factor I ₉₀ 0.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 175

COMPOUND NAME

OR NUMBER CYCLOQUANIL..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	1.0	5		-	69.5 ± 19.2
	3.0	5		-	46.7 ± 15.9
N	10.0	5	1	-	22.4 ± 12.5
	30.0	5		-	0
	Ø	10		22.5	
ED ₅₀ (range) 2.8(1.0 - 8.0)					
ED ₉₀ (range) 6.3(2.2 - 17.5)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	42.4 ± 9.3
	3.0	5		-	15.6 ± 8.0
N/1708	10.0	5	1	-	7.9 ± 4.8
	30.0	5		-	0
	Ø	10		19.7	
ED ₅₀ (range) 1.3(0.7 - 3.8)					
ED ₉₀ (range) 3.7(2.0 - 11)					
Resistance factor I ₉₀ 0.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 176

COMPOUND NAME

OR NUMBER CYCLOGUANIL..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80 / H₂O.. ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >30... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	66.5 ± 5.6
	3.0	5		-	46.7 ± 5.6
N	10.0	5	1	-	3.0 ± 2.6
	30.0	5		-	0
	Ø	5		33.0	
ED ₅₀ (range) 1.8(1.1 - 3.1)					
ED ₉₀ (range) 4.6(2.8 - 8.0)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	75.7 ± 6.5
	3.0	5		-	53.5 ± 5.8
NH	10.0	5	1	-	21.9 ± 9.9
	30.0	5		-	0
	Ø	5		20.4	
ED ₅₀ (range) 2.9(1.4 - 7.2)					
ED ₉₀ (range) 6.4(3.0 - 16.0)					
Resistance factor I ₉₀ 1.4					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 177

COMPOUND NAME

OR NUMBER CYCLOGUANIL..... PARASITE (SUB)SPECIES P. berghei....

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC/IP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	71.0 ± 5.9
	3.0	5		-	51.2 ± 5.0
NPN	10.0	5	1	-	20.1 ± 9.4
	30.0	5		-	0.6 ± 0.3
	Ø	10		22.3	
ED ₅₀ (range) 2.4(1.4 - 5.4)					
ED ₉₀ (range) 10.0(5.6 - 22.0)					
Resistance factor I ₉₀ 2.2					
	1.0	5	-	-	39.1 ± 11.7
	3.0	5		-	31.3 ± 10.1
MEN	10.0	5	1	-	6.3 ± 2.4
	30.0	5		-	0.7 ± 0.6
	Ø	10		15.9	
ED ₅₀ (range) 1.0(0.4 - 2.3)					
ED ₉₀ (range) 5.2(2.3 - 12.5)					
Resistance factor I ₉₀ 1.1					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 178

COMPOUND NAME

OR NUMBER ..CYCLOGUANIL..... PARASITE (SUB)SPECIES ...*P. berghei*...

FORMULATION ..Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/12/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >.30... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	52.4 ± 17.8
	3.0	5		-	15.3 ± 5.3
Q	10.0	5	1	-	0.7 ± 0.3
	30.0	5		-	0
	Ø	5		6.1	
ED ₅₀ (range) 1.0(0.7 - 1.7)					
ED ₉₀ (range) 3.4(2.1 - 5.4)					
Resistance factor, I ₉₀ 0.7					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCICIDES)

TABLE 179

COMPOUND NAME

OR NUMBER CYCLOGUANIL PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	81.4 ± 8.1
	1.0	5		-	25.2 ± 10.4
N/1100	3.0	5	1	-	4.0 ± 0.7
	10.0	5		-	2.0 ± 0.9
	Ø	10		11.1	
ED ₅₀ (range) 0.5(0.3 - 1.0)					
ED ₉₀ (range) 2.5(1.4 - 4.6)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 180

COMPOUND NAME

OR NUMBER

CYCLOQUANIL

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80/H₂O

ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	80.7 ± 6.6
	1.0	5		-	82.2 ± 8.1
P	3.0	5	1	-	86.5 ± 4.1
	10.0	5		-	81.9 ± 4.3
	∅	10		10.7	
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					
	0.3	5		-	84.7 ± 1.7
	1.0	5		-	91.9 ± 3.5
B	3.0	5	1	-	95.6 ± 2.8
	10.0	5		-	83.9 ± 2.6
	∅	10		23.3	
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCICIDS)

TABLE 181

COMPOUND NAME

OR NUMBER CYCLOQUANIL PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	86.4 ± 3.2
	1.0	5		-	89.0 ± 6.0
PYR	3.0	5	1	-	87.1 ± 3.7
	10.0	5		-	84.9 ± 3.8
	∅	10		25.0	
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 182

COMPOUND NAME

OR NUMBER

Cycloguanil

PARASITE (SUB)SPECIES

P. berghei

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC, 4P/10/14

MAXIMUM TOLERATED DOSE (MTD) > 30 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X 100
	1.0	5		-	89.3 ± 7.5
	3.0	5		-	49.4 ± 16.5
NS	10.0	5	1	-	3.4 ± 3.0
	30.0	5		-	0
	Ø	10		26.2	
ED ₅₀ (range) 2.6(1.8 - 4.1)					
ED ₉₀ (range) 6.9(4.6 - 10.5)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	51.7 ± 9.8
	3.0	5		-	38.3 ± 5.0
SH	10.0	5	1	-	6.2 ± 3.2
	30.0	5		-	0.09 ± 0.08
	Ø	10		23.5	
ED ₅₀ (range) 2.6(1.3 - 4.0)					
ED ₉₀ (range) 6.8(3.4 - 10.5)					
Resistance factor I ₉₀ 1.0					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 183

COMPOUND NAME

OR NUMBER

Cycloguanil

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80/H₂O

ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD)

>30 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	57.8 ± 5.1
	3.0	5		-	49.6 ± 9.7
NS 1708	10.0	5	1	-	5.7 ± 2.5
	30.0	5		-	0.01 ± 0.01
	∅	10		15.4	
ED ₅₀ (range) 2.0(1.0-3.5)					
ED ₉₀ (range) 5.0(2.6-9.0)					
Resistance factor I ₉₀ 0.7					
	1.0	5		-	91.0 ± 4.6
	3.0	5		-	49.7 ± 13.8
SPN	10.0	5	1	-	34.5 ± 8.7
	30.0	5		-	0.2 ± 0.2
	∅	10		11.3	
ED ₅₀ (range) 4.1(1.5-8.7)					
ED ₉₀ (range) 11.5(4.2-24.0)					
Resistance factor I ₉₀ 1.7					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 184

COMPOUND NAME

OR NUMBER ... **CYCLOGUANIL** ... PARASITE (SUB)SPECIES ... **P. berghei** ...

FORMULATION ... **Tween 80/H₂O** ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	100 ± 4.2
	1.0	5		-	74.0 ± 5.9
ORA	3.0	5	1	-	62.1 ± 12.2
	10.0	5		-	44.2 ± 13.7
	∅	10		12.3	
ED ₅₀ (range) 4.8(2.2 - 11.8)					
ED ₉₀ (range) 44.0(20.0 - 110)					
Resistance factor I ₉₀					
	0.3	5		-	85.7 ± 18.7
	1.0	5		-	48.4 ± 17.7
RC	3.0	5	1	-	11.6 ± 7.1
	10.0	5		-	2.6 ± 2.0
	∅	10		3.8	
ED ₅₀ (range) 0.8(0.4 - 1.5)					
ED ₉₀ (range) 3.6(2.1 - 7.1)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 185

COMPOUND NAME

OR NUMBER CYCLOQUANIL PARASITE (SUB)SPECIES Py. nigeriensis

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/1P/1P/1P

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	88.0 ± 12.4
	1.0	5		-	46.9 ± 6.4
NIG	3.0	5	1	-	44.9 ± 8.7
	10.0	5		-	17.2 ± 9.9
	Ø	10		20.4	
ED ₅₀ (range) 1.4(0.6-3.5)					
ED ₉₀ (range) 12.3(5.4-29.0)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 186

COMPOUND NAME

OR NUMBER MENOCTONE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	43.9 ± 13.1
	3.0	5		-	0
N	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		39.1	
ED ₅₀ (range) 0.95(0.8-1.1)					
ED ₉₀ (range) 1.4(1.2-1.6)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	67.2 ± 18.9
	3.0	5		-	0.01 ± 0.01
NH	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		25.1	
ED ₅₀ (range) 1.1(1.0-1.3)					
ED ₉₀ (range) 1.6(1.3-1.8)					
Resistance factor I ₉₀ 1.1					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 187

COMPOUND NAME

OR NUMBER MENOCTONE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 30 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	1.0	5		-	38.7 ± 3.7
	3.0	5		-	0.2 ± 0.1
Q	10.0	5	1	-	0.1 ± 0.1
	30.0	5		-	0
	Ø	10		4.7	
ED ₅₀ (range) 0.8(0.3 - 1.4)					
ED ₉₀ (range) 1.8(0.7 - 3.3)					
Resistance factor I ₉₀ 1.3					
	1.0	5		-	80.7 ± 2.3
	3.0	5		-	74.3 ± 3.9
MEN	10.0	5	1	-	75.1 ± 7.4
	30.0	5		-	71.9 ± 1.5
	Ø	10		11.9	
ED ₅₀ (range) > 30					
ED ₉₀ (range) >> 30					
Resistance factor I ₉₀ >> 214					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 188

COMPOUND NAME

OR NUMBER ...MENOCTONE..... PARASITE (SUB)SPECIES *P. berghei*.....

FORMULATION *Tween 80/H₂O*. ROUTE OF ADMINISTRATION : SC/~~IP~~/~~PO~~/~~IV~~

MAXIMUM TOLERATED DOSE (MTD) ≥ 30 .. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X 100
	1.0	5		-	96.2 $\pm$ 6.0
	3.0	5		-	0
NPN	10.0	5	1	-	0
	30.0	5		-	0
	$\emptyset$	10		21.9	
ED ₅₀ (range) 1.4 (1.2 - 2.0)					
ED ₉₀ (range) 1.8 (1.6 - 2.6)					
Resistance factor I ₉₀ 1.3					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 189

COMPOUND NAME

OR NUMBER MENOCTONE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >30... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x100
	1.0	5		-	78.2 ± 14.0
	3.0	5		-	1.7 ± 1.6
N	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		22.5	
ED ₅₀ (range) 1.3(0.9 - 1.5)					
ED ₉₀ (range) 2.2(1.4 - 2.4)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	96.0 ± 1.3
	3.0	5		-	1.1 ± 0.5
N/1708	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		19.7	
ED ₅₀ (range) 1.6(1.4 - 1.7)					
ED ₉₀ (range) 2.3(2.0 - 2.5)					
Resistance factor I ₉₀ 1.0					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 190

COMPOUND NAME

OR NUMBER MENOCTONE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/14/10/14

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	62.7 ± 8.6
	1.0	5		-	27.2 ± 16.8
N/1100	3.0	5	1	-	0.4 ± 0.3
	10.0	5		-	0
	∅	10		11.1	
ED ₅₀ (range) 0.5(0.3 - 0.9)					
ED ₉₀ (range) 1.2(0.7 - 2.3)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 191

COMPOUND NAME

OR NUMBER

Menoclon

PARASITE (SUB)SPECIES *P. berghei*

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/IV/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >30 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	94.9 ± 3.3
	3.0	5		-	31.7 ± 19.1
NS	10.0	5	1	-	0.3 ± 0.2
	30.0	5		-	0
	Ø	10		23.2	
ED ₅₀ (range) 2.3(1.6-3.0)					
ED ₉₀ (range) 4.5(3.1-5.8)					
Resistance factor I ₉₀ 1.0					
	1.0	5		-	100 ± 3.2
	3.0	5		-	36.5 ± 17.7
SH	10.0	5	1	-	0
	30.0	5		-	0
	Ø	10		21.1	
ED ₅₀ (range) 2.7(2.3-3.1)					
ED ₉₀ (range) 3.8(3.2-4.4)					
Resistance factor I ₉₀ 0.8					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDALS)

TABLE 192

COMPOUND NAME

OR NUMBER Menoctone PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/1P/10/1V

MAXIMUM TOLERATED DOSE (MTD) >30 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	1.0	5		-	96.4 ± 2.8
	3.0	5		-	28.9 ± 8.7
NS1708	10.0	5	1	-	0.01 ± 0.01
	30.0	5		-	0
	∅	10		20.9	
ED ₅₀ (range) 2.1(1.8 - 2.6)					
ED ₉₀ (range) 3.5(3.0 - 4.4)					
Resistance factor I ₉₀ 0.8					
	1.0	5		-	80.6 ± 6.9
	3.0	5		-	19.8 ± 8.6
SPN	10.0	5	1	-	0.9 ± 0.2
	30.0	5		-	0
	∅	10		21.4	
ED ₅₀ (range) 1.7(1.2 - 2.3)					
ED ₉₀ (range) 4.3(3.0 - 5.6)					
Resistance factor I ₉₀ 1.0					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 193

COMPOUND NAME

OR NUMBER ... FLOXACRINE ... PARASITE (SUB)SPECIES ... P. berghei ...

FORMULATION ... Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/10/10/11

MAXIMUM TOLERATED DOSE (MTD) > 10 ... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	89.3 ± 2.9
	1.0	5		-	15.5 ± 12.2
N	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		25.7	
ED ₅₀ (range) 0.6(0.5 - 0.7)					
ED ₉₀ (range) 1.0(0.8 - 1.3)					
Resistance factor I ₉₀					
	0.3	5		-	91.9 ± 8.1
	1.0	5		-	0.2 ± 0.2
N/1708	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		17.2	
ED ₅₀ (range) 0.4(0.3 - 0.8)					
ED ₉₀ (range) 0.6(0.5 - 1.2)					
Resistance factor I ₉₀ 0.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

AD-A195 990

CHEMOTHERAPY OF RODENT MALARIA (H) LONDON SCHOOL OF
HYGIENE AND TROPICAL MEDICINE (ENGLAND) DEPT OF MEDICAL
PHOT OZOOLOGY W PETERS SEP 86 DAND17-85-C-3172

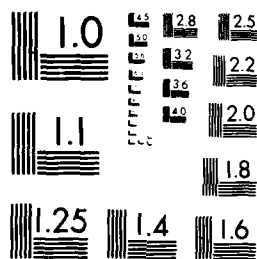
3/3

UNCLASSIFIED

F/C 6/3

NL

1-101
1-101
1-101



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 194

COMPOUND NAME

OR NUMBER FLOXACRINE..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80 / H₂O. ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >10... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	100 ± 1.6
	1.0	5		-	8.2 ± 7.0
N	3.0	5	1	-	0.2 ± 0.2
	10.0	5		-	0
	Ø	10		24.7	
ED ₅₀ (range) 0.9 (0.5 - 1.3)					
ED ₉₀ (range) 1.3 (0.7 - 1.9)					
Resistance factor I ₉₀ 1.0					
	0.3	5		-	96.1 ± 5.2
	1.0	5		-	1.4 ± 0.8
NH	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		20.3	
ED ₅₀ (range) 0.5 (0.4 - 0.7)					
ED ₉₀ (range) 0.8 (0.6 - 1.1)					
Resistance factor I ₉₀ 0.6					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 195

COMPOUND NAME

OR NUMBER FLOXACRINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 10 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.3	5		-	42.2 ± 13.8
	1.0	5		-	1.0 ± 0.6
Q	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		6.4	
ED ₅₀ (range) 0.25(0.2-0.3)					
ED ₉₀ (range) 0.5(0.4-0.7)					
Resistance factor I ₉₀ 0.4					
	0.3	5		-	52.5 ± 13.4
	1.0	5		-	21.8 ± 11.1
MEN	3.0	5	1	-	0.15 ± 0.15
	10.0	5		-	0
	Ø	10		13.3	
ED ₅₀ (range) 0.4(0.2-0.7)					
ED ₉₀ (range) 1.0(0.4-1.9)					
Resistance factor I ₉₀ 0.8					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 196

COMPOUND NAME

OR NUMBER FLOXACINE..... PARASITE (SUB)SPECIES P. berghei....

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >.10... MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	13.0 ± 9.1
	1.0	5		-	0.8 ± 0.3
NPN	3.0	5	1	-	0.02 ± 0.01
	10.0	5		-	0
	Ø	10		23.8	
ED ₅₀ (range) 0.1(0.06-0.14)					
ED ₉₀ (range) 0.3(0.2-0.5)					
Resistance factor I ₉₀ 0.2					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 197

COMPOUND NAME

OR NUMBER FLOXACRINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/AD/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{X100}
	0.03	5		-	85.7 ± 5.5
	0.1	5		-	95.1 ± 5.5
P	0.3	5	1	-	70.8 ± 16.4
	1.0	5		-	0
	∅	10		12.2	

ED₅₀(range) 0.24(0.16-0.44)

ED₉₀(range) 0.39(0.25-0.7)

Resistance factor I₉₀

	0.03	5		-	95.2 ± 6.2
	0.1	5		-	95.8 ± 3.1
B	0.3	5	1	-	76.6 ± 7.8
	1.0	5		-	0
	∅	10		25.0	

ED₅₀(range) 0.25(0.17-0.43)

ED₉₀(range) 0.40(0.26-0.67)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 198

COMPOUND NAME

OR NUMBER FLOXACRINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.03	5		-	82.9 ± 4.5
	0.1	5		-	82.9 ± 4.5
PYR	0.3	5	1	-	37.4 ± 12.8
	1.0	5		-	0.08 ± 0.08
	∅	10		25.0	
ED ₅₀ (range) 0.19(0.12-0.29)					
ED ₉₀ (range) 0.38(0.25-0.58)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 199

COMPOUND NAME
OR NUMBER **FLOXACRINE** PARASITE (SUB)SPECIES **P. berghei**
FORMULATION **Tween 80/H₂O** ROUTE OF ADMINISTRATION : **SC/4P/10/14**
MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.03	5		-	78.9 ± 10.2
	0.1	5		-	51.5 ± 9.2
N/1100	0.3	5	1	-	19.1 ± 6.7
	1.0	5		-	0.4 ± 0.3
	Ø	10		11.1	
ED ₅₀ (range) 0.1 (0.04 - 0.17)					
ED ₉₀ (range) 0.3 (0.13 - 0.5)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 200

COMPOUND NAME

OR NUMBER Floxacin PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 10 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	93.9 ± 2.6
	1.0	5		-	0.01 ± 0.01
NS	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		30.4	
ED ₅₀ (range) 0.42(0.4 - 0.45)					
ED ₉₀ (range) 0.56(0.52 - 0.6)					
Resistance factor I ₉₀ 1.0					
	0.3	5		-	58.8 ± 17.5
	1.0	5		-	0
SH	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		13.5	
ED ₅₀ (range) 0.31(0.24 - 0.37)					
ED ₉₀ (range) 0.46(0.4 - 0.55)					
Resistance factor I ₉₀ 0.8					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 201

COMPOUND NAME
OR NUMBER Floxacin PARASITE (SUB)SPECIES P. berghei
FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV
MAXIMUM TOLERATED DOSE (MTD) > 10 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.3	5		-	53.6 ± 3.8
	1.0	5		-	1.0 ± 0.3
NS/1708	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		19.8	
ED ₅₀ (range) 0.31(0.26 - 0.36)					
ED ₉₀ (range) 0.58(0.52 - 0.65)					
Resistance factor I ₉₀ 1.0					
	0.3	5		-	51.9 ± 3.0
	1.0	5		-	0.4 ± 0.2
SPN	3.0	5	1	-	0
	10.0	5		-	0
	Ø	10		21.0	
ED ₅₀ (range) 0.30(0.21 - 0.33)					
ED ₉₀ (range) 0.52(0.46 - 0.57)					
Resistance factor I ₉₀ 0.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 202

COMPOUND NAME

OR NUMBER **FLOXACRINE** PARASITE (SUB)SPECIES **P. berghei**

FORMULATION **Tween 80/H₂O** ROUTE OF ADMINISTRATION : **SC/TP/PO/IV**

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.03	5		-	84.4 ± 9.5
	0.1	5		-	61.0 ± 5.8
ORA	0.3	5	1	-	46.3 ± 15.6
	1.0	5		-	1.2 ± 0.9
	Ø	10		12.3	
ED ₅₀ (range) 0.13(0.05-0.4)					
ED ₉₀ (range) 0.4(0.17-1.2)					
Resistance factor I ₉₀					
	0.03	5		-	89.5 ± 15.7
	0.1	5		-	61.6 ± 15.7
RC	0.3	5	1	-	21.1 ± 7.1
	1.0	5		-	0.1 ± 0.05
	Ø	10		3.8	
ED ₅₀ (range) 0.11(0.05-0.2)					
ED ₉₀ (range) 0.27(0.11-0.48)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

TABLE 203

OR NUMBER FLOXACRINE PARASITE (SUB)SPECIES P. y. nigeriensis

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/~~IP/PO/IV~~

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.03	5		-	99.0 ± 4.1
	0.1	5		-	77.9 ± 6.6
NIG	0.3	5	1	-	64.6 ± 10.1
	1.0	5		-	0.1 ± 0.1
	∅	10		20.4	

ED ₅₀ (range)	0.19(0.08 - 0.46)
--------------------------	-------------------

ED₉₀(range) 0.44(0.19 - 1.07)

Resistance factor I_{90} ED₅₀ (range)ED₉₀ (range)Resistance factor I_{90}

201

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 204

COMPOUND NAME

OR NUMBER CLINDAMYCIN PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/1P/P0/1V

MAXIMUM TOLERATED DOSE (MTD) >100.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	3.0	5		-	88.4 ± 4.7
	10.0	5		-	33.5 ± 8.6
N	30.0	5	1	-	9.3 ± 2.8
	100.0	5		-	3.0 ± 1.0
	Ø	10		25.7	
ED ₅₀ (range) <u>8.3(4.4 - 14.5)</u>					
ED ₉₀ (range) <u>36(19 - 63)</u>					
Resistance factor I ₉₀ <u>1.0</u>					
	3.0	5		-	95.9 ± 5.7
	10.0	5		-	39.2 ± 6.7
N/1708	30.0	5	1	-	11.3 ± 6.1
	100.0	5		-	0.1 ± 0.1
	Ø	10		17.2	
ED ₅₀ (range) <u>9.8(5.1 - 19)</u>					
ED ₉₀ (range) <u>27(14 - 52)</u>					
Resistance factor I ₉₀ <u>0.8</u>					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 205

COMPOUND NAME

OR NUMBER CLINDAMYCIN..... PARASITE (SUB)SPECIES P. berghei.....

FORMULATION Tween 80/H₂O.. ROUTE OF ADMINISTRATION : SC/10/10/14

MAXIMUM TOLERATED DOSE (MTD) >100.. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	3.0	5		-	69.6 ± 6.8
	10.0	5		-	59.6 ± 6.9
N	30.0	5	1	-	5.0 ± 0.9
	100.0	5		-	1.7 ± 0.2
	Ø	10		24.7	
ED ₅₀ (range) 5.8 (2.8-17)					
ED ₉₀ (range) 31 (15-93)					
Resistance factor I ₉₀ 1.0					
	3.0	5		-	79.0 ± 8.9
	10.0	5		-	35.5 ± 10.2
NH	30.0	5	1	-	19.7 ± 9.0
	100.0	5		-	8.8 ± 3.7
	Ø	10		20.3	
ED ₅₀ (range) 9.3 (3.7-19.5)					
ED ₉₀ (range) 57 (22-120)					
Resistance factor I ₉₀ 1.8					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 206

COMPOUND NAME

OR NUMBER CLINDAMYCIN PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >1000 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	79.7 ± 10.8
	10.0	5		-	12.8 ± 3.3
Q	30.0	5	1	-	0.03 ± 0.03
	100.0	5		-	0
	Ø	10		6.4	
ED ₅₀ (range) 4.8(3.7-5.9)					
ED ₉₀ (range) 9.7(7.4-11.7)					
Resistance factor I ₉₀ 0.3					
	3.0	5		-	20.5 ± 8.1
	10.0	5		-	14.9 ± 8.5
MEN	30.0	5	1	-	1.7 ± 1.0
	100.0	5		-	0.15 ± 0.15
	Ø	10		13.3	
ED ₅₀ (range) 1.1(0.4-3.2)					
ED ₉₀ (range) 7.5(2.7-21)					
Resistance factor I ₉₀ 0.2					

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 207

COMPOUND NAME

OR NUMBER .CLINDAMYCIN..... PARASITE (SUB)SPECIES .*P. berghei*...

FORMULATION .Tween 80./H₂O. ROUTE OF ADMINISTRATION : SC/~~IP~~/~~PO~~/~~IV~~

MAXIMUM TOLERATED DOSE (MTD) >.100. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	3.0	5		-	36.2 ± 4.7
	10.0	5		-	17.4 ± 6.3
NPN	30.0	5	1	-	1.0 ± 0.6
	100.0	5		-	0.01 ± 0.01
	Ø	10		23.8	
ED ₅₀ (range) 2.5(1.8-4.7)					
ED ₉₀ (range) 9.0(6.4-17)					
Resistance factor I ₉₀ 0.3					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 208

COMPOUND NAME

OR NUMBER

CLINDAMYCIN

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80/H₂O

ROUTE OF ADMINISTRATION : SC/10/20/14

MAXIMUM TOLERATED DOSE (MTD)

MG/KG X ...

Strain	Daily dose mg/kg 00-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x100
	3.0	5		-	14.2 ± 6.9
	10.0	5		-	1.3 ± 0.5
N/1100	30.0	5	1	-	0.4 ± 0.3
	100.0	5		-	0
	∅	10		11.1	
ED ₅₀ (range) 0.5(0.3 - 0.9)					
ED ₉₀ (range) 2.9(1.9 - 5.7)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 209

COMPOUND NAME

OR NUMBER Clindamycin PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	89.8 ± 5.5
	10.0	5		-	81.2 ± 1.5
NS	30.0	5	1	-	22.0 ± 5.1
	100.0	5		-	3.8 ± 2.0
	∅	10		30.4	

ED₅₀(range) 14.6(8.2 - 27.5)

ED₉₀(range) 55.0(31 - 100)

Resistance factor I₉₀ 1.0

	3.0	5		-	76.6 ± 13.8
	10.0	5		-	46.2 ± 11.0
SH	30.0	5	1	-	0.2 ± 0.2
	100.0	5		-	0
	∅	10		13.5	

ED₅₀(range) 6.2(2.8 - 11.0)

ED₉₀(range) 14.0(6.2 - 25.0)

Resistance factor I₉₀ 0.3

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 210

COMPOUND NAME

OR NUMBER

Clindamycin

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80/H₂O

ROUTE OF ADMINISTRATION : SC/11/10/11

MAXIMUM TOLERATED DOSE (MTD) >100. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{X100}
	3.0	5		-	81.4 ± 6.7
	10.0	5		-	47.1 ± 2.3
NS/1708	30.0	5	1	-	5.0 ± 1.4
	100.0	5		-	0.3 ± 0.2
	∅	10		19.8	
ED ₅₀ (range) 7.0(5.0-10.3)					
ED ₉₀ (range) 24.0(17.5-35.0)					
Resistance factor I ₉₀ 0.4					
	3.0	5		-	57.2 ± 7.7
	10.0	5		-	46.8 ± 4.4
SPN	30.0	5	1	-	3.7 ± 1.8
	100.0	5		-	0.4 ± 0.3
	∅	10		21.0	
ED ₅₀ (range) 4.9(2.0-10.0)					
ED ₉₀ (range) 24.0(10.0-50.0)					
Resistance factor I ₉₀ 0.4					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 211

COMPOUND NAME

OR NUMBER CLINDAMYCIN PARASITE (SUB)SPECIES P. yoelii sp.

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100 MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	3.0	5		-	100 ± 5.1
	10.0	5		-	64.5 ± 17.4
NS/1100	30.0	5	1	-	0.8 ± 0.7
	100.0	5		-	0
	∅	10		5.3	

ED₅₀(range) 11.3(9.3-13.8)

ED₉₀(range) 18.5(15.0-22.5)

Resistance factor I₉₀

ED₅₀(range)

ED₉₀(range)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 212

COMPOUND NAME

OR NUMBER PYRONARIDINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.03	5		-	100 ± 0.2
	0.1	5		-	85.6 ± 5.3
N	0.3	5	1	-	72.6 ± 17.0
	1.0	5		-	4.0 ± 2.0
	∅	10		29.6	
ED ₅₀ (range) 0.31(0.17 - 0.66)					
ED ₉₀ (range) 0.71(0.4 - 1.5)					
Resistance factor I ₉₀ 1.0					
	0.03	5		-	97.5 ± 5.1
	0.1	5		-	89.4 ± 3.9
N 1708	0.3	5	2	-	78.6 ± 6.0
	1.0	5		-	30.7 ± 12.6
	3.0	5		-	0.01 ± 0.01
	∅	20		17.8	
ED ₅₀ (range) 0.32(0.09 - 0.90)					
ED ₉₀ (range) 0.67(0.2 - 1.9)					
Resistance factor I ₉₀ 0.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 213

COMPOUND NAME

OR NUMBER Pyronaridine PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 100 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.03	5		-	98.7 ± 3.9
	0.1	5		-	95.2 ± 3.9
NH	0.3	5	2	-	61.0 ± 9.7
	1.0	5		-	32.2 ± 7.9
	3.0	5		-	0
	∅	20		16.6	

ED₅₀(range) 0.37(0.22 - 0.85)

ED₉₀(range) 0.75(0.44 - 1.7)

Resistance factor I₉₀ 1.1

	0.3	5		-	85.1 ± 9.0
	1.0	5		-	69.2 ± 6.7
NPN	3.0	5	2	-	17.8 ± 2.8
	10.0	5		-	8.2 ± 4.3
	30.0	5		-	7.8 ± 2.6
	100.0	5		-	2.5 ± 1.2
	∅	20		25.4	

ED₅₀(range) 1.4(0.47 - 6.5)

ED₉₀(range) 13.5(4.4 - 60.0)

Resistance factor I₉₀ 19.0

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 214

COMPOUND NAME

OR NUMBER PYRONARIDINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/ID/PO/IV

MAXIMUM TOLERATED DOSE (MTD) > 100 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	3.0	5		-	84.7 ± 7.4
	10.0	5		-	59.4 ± 10.5
Q	30.0	5	1	-	52.5 ± 12.0
	100.0	5		-	46.2 ± 2.7
	∅	10		9.3	

ED₅₀(range) 38.0(10.0-235)

ED₉₀(range) > 100

Resistance factor I₉₀ > 141

	0.1	5		-	95.2 ± 3.9
	0.3	5		-	61.0 ± 9.1
MEN	1.0	5	2	-	32.2 ± 7.9
	3.0	5		-	0
	∅	20		22.6	

ED₅₀(range) 0.36(0.21-0.85)

ED₉₀(range) 0.73(0.44-1.75)

Resistance factor I₉₀ 1.0

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTICIDES)

TABLE 215

COMPOUND NAME

OR NUMBER

PYRONARIDINE

PARASITE (SUB)SPECIES

P. berghei

FORMULATION

Tween 80 / H₂O

ROUTE OF ADMINISTRATION : SC ~~IP/PO/IV~~

MAXIMUM TOLERATED DOSE (MTD)

MG/KG X ...

Strain	Daily dose mg/kg DO-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	85.3 ± 9.4
	0.3	5		-	88.7 ± 7.2
P	1.0	5	1	-	25.1 ± 14.7
	3.0	5		-	0
	∅	10		11.4	

ED₅₀(range) 0.6(0.4-0.9)

ED₉₀(range) 1.0(0.7-1.5)

Resistance factor I₉₀

	0.1	5		-	92.9 ± 3.0
	0.3	5		-	91.8 ± 3.7
B	1.0	5	1	-	57.9 ± 8.8
	3.0	5		-	0.02 ± 0.01
	10.0	5		-	0
	∅	10		24.8	

ED₅₀(range) 0.8(0.5-1.2)

ED₉₀(range) 1.4(0.9-2.2)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 216

COMPOUND NAME

OR NUMBER PYRONARIDINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/HP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg DO-0+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	91.1 ± 4.1
	0.3	5		-	86.3 ± 10.6
PYR	1.0	5	1	-	35.6 ± 12.1
	3.0	5		-	0.2 ± 0.2
	∅	10		23.7	

ED₅₀(range) 0.4 (0.2 - 0.9)

ED₉₀(range) 1.1 (0.5 - 2.3)

Resistance factor I₉₀

ED₅₀(range)

ED₉₀(range)

Resistance factor I₉₀

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

TABLE 217

OR NUMBER

PYRONARIDINE

PARASITE (SUB)SPECIES

P. bergher

FORMULATION Tween 80/H₂O... ROUTE OF ADMINISTRATION : SC/~~IP/PO/IV~~

Strain	Daily dose mg/kg. D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% ^{x100}
	0.1	5		-	75.9 ± 10.2
	0.3	5		-	68.3 ± 18.7
N/1100	1.0	5	1	-	45.2 ± 17.6
	3.0	5		-	3.2 ± 2.4
	∅	10		11.1	
ED ₅₀ (range) 0.4(0.1 - 1.4)					
ED ₉₀ (range) 1.6(0.5 - 5.2)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W.Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 218

COMPOUND NAME

OR NUMBER PYRONARIDINE PARASITE (SUB)SPECIES P. berghei

FORMULATION Tween 80 / H₂O ROUTE OF ADMINISTRATION : SC/TP/PO/IV

MAXIMUM TOLERATED DOSE (MTD) >100.0 MG/KG X 4

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.1	5		-	96.1 ± 2.6
	0.3	5		-	90.5 ± 1.7
NS	1.0	5	1	-	84.7 ± 8.1
	3.0	5		-	0.1 ± 0.1
	Ø	10		25.3	
ED ₅₀ (range) 0.6(0.2-2.1)					
ED ₉₀ (range) 1.2(0.4-4.0)					
Resistance factor I ₉₀ 1.0					
	3.0	5		-	58.3 ± 7.3
	10.0	5		-	48.6 ± 7.2
SH	30.0	5	1	-	41.7 ± 5.1
	100.0	5		-	31.8 ± 8.4
	Ø	10		24.7	
ED ₅₀ (range) 8.0(2.5-20.0)					
ED ₉₀ (range) >100					
Resistance factor I ₉₀ >83.3					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 219

COMPOUND NAME

OR NUMBER PYRONARIDINE..... PARASITE (SUB)SPECIES *P. berghei*.....

FORMULATION Tween 80/H₂O. ROUTE OF ADMINISTRATION : SC ~~IP/PO~~ IV

MAXIMUM TOLERATED DOSE (MTD) >100. MG/KG X 4.

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.1	5		-	90.2 ± 4.0
	0.3	5		-	91.4 ± 4.2
NS1708	1.0	5	1	-	64.9 ± 17.6
	3.0	5		-	0.0 ± 0.0
	∅	10		21.7	
ED ₅₀ (range) 0.7(0.4-1.5)					
ED ₉₀ (range) 1.3(0.8-2.8)					
Resistance factor I ₉₀ 1.1					
	3.0	5		-	38.5 ± 7.5
	10.0	5		-	20.9 ± 8.1
SPN	30.0	5	1	-	14.4 ± 6.1
	100.0	5		-	3.7 ± 1.4
	∅	10		10.7	
ED ₅₀ (range) 2.2(1.0-5.0)					
ED ₉₀ (range) 33.5(16.0-78.0)					
Resistance factor I ₉₀ 27.9					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 220

COMPOUND NAME

OR NUMBER **PYRONARIDINE** PARASITE (SUB)SPECIES **P. yoelii sp.**

FORMULATION **Tween 80/H₂O** ROUTE OF ADMINISTRATION : **SC/10/10/10**

MAXIMUM TOLERATED DOSE (MTD) **> 3.0** MG/KG X **4**

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.1	5		-	100 ± 5.4
	0.3	5		-	100 ± 4.7
NS/1100	1.0	5	1	-	61.1 ± 19.2
	3.0	5		-	0
	Ø	10		5.3	
ED ₅₀ (range) 0.9(0.6-1.3)					
ED ₉₀ (range) 1.4(0.9-1.8)					
Resistance factor I ₉₀					
ED ₅₀ (range)					
ED ₉₀ (range)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

SUMMARY OF ANTIMALARIAL DRUG TESTS
(BLOOD SCHIZONTOCIDES)

TABLE 221

COMPOUND NAME

OR NUMBER

PYRONARIDINE

PARASITE (SUB)SPECIES *P. berghei*

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/40/40/40

MAXIMUM TOLERATED DOSE (MTD) MG/KG X ...

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% x 100
	0.1	5		-	85.5 ± 5.9
	0.3	5		-	61.8 ± 7.3
ORA	1.0	5	1	-	57.4 ± 12.0
	3.0	5		-	3.5 ± 1.5
	10.0	5		-	0
	∅	10		12.3	
ED ₅₀ (range) 0.5(0.2 - 1.5)					
ED ₉₀ (range) 1.5(0.5 - 4.0)					
Resistance factor I ₉₀					
	0.1	5		-	65.3 ± 13.1
	0.3	5		-	43.7 ± 7.1
RC	1.0	5	1	-	38.8 ± 9.0
	3.0	5		-	34.2 ± 14.1
	10.0	5		-	21.6 ± 10.6
	∅	10		3.8	
ED ₅₀ (range) 0.5(0.1 - 3.5)					
ED ₉₀ (range) 10.0(2.4 - 62.0)					
Resistance factor I ₉₀					

Principal Investigator: Professor W. Peters
Department of Medical Protozoology
London School of Hygiene & Tropical Medicine

TABLE 222

OR NUMBER PYRONARIDINE PARASITE (SUB)SPECIES Py. nigeriensis

FORMULATION Tween 80/H₂O ROUTE OF ADMINISTRATION : SC/~~IP~~/~~PO~~/~~IV~~

Strain	Daily dose mg/kg D0-D+3	No. of mice	No. of experiments	Mean control parasite rate %	Treated PR% Control PR% X100
	0.1	5		-	67.8 ± 5.6
	0.3	5		-	44.3 ± 2.9
NIG	1.0	5	1	-	34.0 ± 6.7
	3.0	5		-	0.2 ± 0.2
	10.0	5		-	0
	∅	10		20.4	

ED₅₀(range) 0.3(0.1 - 0.8)

ED₉₀(range) 0.7(0.3 - 2.3)

Resistance factor I_{90} ED₅₀ (range)

ED₉₀ (range)

Resistance factor l_{90}

220

WRAIR U

DISTRIBUTION LIST

12 copies	Director Walter Reed Army Institute of Research Walter Reed Army Medical Center ATTN: SGRD-UWZ-C Washington, DC 20307-5100
1 copy	Commander US Army Medical Research and Development Command ATTN: SGRD-RMI-S Fort Detrick, Frederick, Maryland 21701-5012
12 copies	Defense Technical Information Center (DTIC) ATTN: DTIC-DDAC Cameron Station Alexandria, VA 22304-6145
1 copy	Dean School of Medicine Uniformed Services University of the Health Sciences 4301 Jones Bridge Road Bethesda, MD 20814-4799
	Academy of Health Sciences, US Army ATTN: AHS-CDM Fort Sam Houston, TX 78234-6100

END

DATE
FILMED

9 - 88

