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Experimental Chemotherapy of Schistosomiasis

The Toxicity and Antischistosomal Activity of CGP-4540 in Primates (Contract Number AID/ta-C-1312)

Progress Report
for the Period
March 31, 1978 to June 1, 1978

Prepared for
Dr. Ernest J. Bueding
Johns Hopkins University

TABLE OF CONTENTS

		Page
Summary		1
Introduction		4
Materials and Methods		6
Results and Comments		10
Tables:		
I	Animal Groups, Treatments and Necropsies (*Cebus apella*)	14
II	Gross Observation at Time of Treatment in *Cebus apella*	17
III	Summary of Hematology in *Cebus apella*	20
IV	Summary of Serology Results in *Cebus apella*	40
V	Summary of Urinalysis Results in *Cebus apella*	60
VI	ECG Observation in *Cebus apella*	80
VII	Pathology Report for *Cebus apella*	85
VIII	Egg Counts/Gram of Feces in *Cebus apella*	93
IX	Worm Burdens at Necropsy of *Cebus apella*	107
Appendix I		110

SUMMARY

As an initial examination of the toxicity of CGP-4540, four Cebus apella primates, 2 male and 2 female of various ages and weighing 2-3 kg,were given two oral doses of 75 mg/kg of CGP-4540, one of which was accompanied by 50 mg/kg of erythromycin. Two animals received the drug alone for the initial treatment and were given the drug plus erythromycin four weeks later. Likewise, two animals received drug and erythromycin on the initial treatment and were given only drug on the crossover experiment. Two other animals (1 male and 1 female) served as controls for the entire crossover experiment and received two doses of the CGP-4540-suspending vehicle.

Before and after treatment all animals were observed for physical and behavioral changes, serial electrocardiograms were taken, and blood and urine samples were collected for study. The blood samples were subjected to extensive, routine clinical laboratory examination, including a variety of hematologic and clinical chemical indices. The urine samples were split, with a portion being subjected to routine clinical laboratory urinalysis and a portion being saved for future examination (by the "Ames' test") for the presence therein of mutagenic substances. The monkeys were sacrificed and necropsied 4 weeks after the second crossover treatment.

Those animals treated with CGP-4540 alone or in combination with erythromycin demonstrated diarrhea shortly after administration. There was little consistency to the feces which appeared as the drug suspension itself, with the same coloration and texture. One control animal succumbed the day after the second treatment, but there were no indications of any direct relationship between the treatment and the death of this animal. At necropsy, no consistent treatment-related gross pathological changes were noted. Except for the diarrhea, the results of this toxicity study did not reveal any major problems or toxicity

with CGP-4540 at oral doses of 75 mg/kg when administered alone or concurrently with 50 mg/kg of erythromycin.

The antischistosomal activity of CGP-4540 in Cebus apella was studied concurrently with the toxicity testing. Fourteen Cebus apella (7 males and 7 females) of various ages and within the weight range of 2-3 kg were infected with 3 different strains of schistosomes. These 14 animals were divided into three groups. Six primates were infected with 300 cercariae of Schistosoma mansoni (WRAIR strain), four with 100 cercariae of Schistosoma japonicum and four with 300 cercariae of Schistosoma haematobium (Egyptian strain). To test the therapeutic efficacy of the drug, 10 mg/kg of CGP-4540 in a single oral dose was administered 70 days after S. mansoni infection and 50 days after S. japonicum infection. Two S. mansoni-infected animals received 50 mg/kg of erythromycin immediately preceding the administration of CGP-4540. The other drug-treated animals received CGP-4540 without erythromycin. Two animals from each group (total of 6 animals) served as infected but untreated controls.

There was little or no reduction in fecal egg counts after the treatment with 10 mg/kg of CGP-4540. Accordingly, the animals were all retreated with 25 mg/kg of CGP-4540, which resulted in a reduction in egg counts.

Two S. mansoni-infected animals, one control and one treated with drug and erythromycin, expired during the experiment. There was no indication of any direct relation between the drug treatment and the resultant deaths. The deaths appeared to be from complications due to the schistosomiasis infection itself.

Mild diarrhea was noted in most treated animals within 1-2 hours after treatment. A slight yellow fecal coloration was noted following doses of 25 mg/kg of CGP-4540 but not doses of 10 mg/kg. Extensive hematologic and serologic examinations were also

conducted and revealed no consistent treatment-related changes in serology or hematology. Urinalysis and electrocardiograms also do not indicate any consistent, significant drug effects. Thus, to the extent to which these experiments are complete, they would indicate that doses of 25 mg/kg of CGP-4540, but not doses of 10 mg/kg, produce significant antischistosomal effects in *Cebus apella* infected with *S. japonicum* and *S. mansoni*.

With respect to the immediate future, necropsies are projected for September for the animals infected with *S. japonicum* and *S. mansoni*. Results of these necropsies should give the significant data pertinent for determining the efficacy of CGP-4540. In addition, the efficacy of 25 mg/kg of CGP-4540 in *S. haematobium*-infected animals will be determined.

Finally, experiments similar to those described in *Cebus apella* will be conducted in *Macaca mulatta*. The necessary animals are now in-house and these experiments will be started within the next few weeks.

INTRODUCTION

C9333-Go/CGP4540 (4-isothiocyanato-4'-nitro-diphenylamine), hereafter referred to as CGP-4540, is a new anthelminthic synthesized and studied at Ciba-Geigy Limited (Basel, Switzerland). Although this substance has very limited water-solubility in animals, the oral administration of suspensions containing relatively large particle sizes produced a "broad spectrum" of anthelmintic activity, including activity against nematodes, filariae, and schistosomes (Striebel, Experientia 32:457,1976). In a more extensive study on the schistosomicidal activity of this compound, Bueding et al (Experientia 32:604,1976) found that it was active against several strains of both S. japonicum and S. mansoni, and that antischistosomal activity was greatly enhanced by reducing the size of the particles in suspension.

Because of the recent widespread concern about the possible mutagenicity and carcinogenicity of antischistosomal drugs, Bueding et al (ibid) studied the mutagenicity of CGP-4540 using the "Ames' test". While CGP-4540 did not exhibit significant mutagenic activity either with or without the simultaneous presence of hepatic microsomes, the urine from CGP-4540 treated mice was mutagenic. However, they also found that this activity could be reduced by pretreating the animals with succinylsulfathiazole, and concluded that intestinal bacteria played a role in the formation of a mutagenic compound from CGP-4540. It was reported that the simultaneous treatment with an antibiotic to reduce the intestinal bacterial flora did not interfere with the antischistosomal activity of CGP-4540, but completely eliminated its mutagenicity. This may also be equivalent to reducing or eliminating its possible carcinogenicity(Batzinger et al, Cancer Research 36:608,1978).

The experiments which are being conducted under Contract AID/ta-C/1312 and are the subject of this report have been

carefully planned to provide the information necessary to support clinical trial in man of the antischistosomal activity of CGP-4540. These experiments involve assessing both the efficacy and toxicity of CGP-4540 when administered alone or in combination with erythromycin, to two species of monkeys, *Cebus apella* and *Macaca mulatta*, which have been infected in some cases with *S. mansoni*, *S. japonicum* and *S. haematobium*.

MATERIALS AND METHODS

Animals

Ten male and ten female Cebus apella with an estimated age range of 2-8 years and weight range of 2-3 kg were used. The animals were purchased from the New England Primate Center, Southboro, Massachusetts. The animals were individually housed in cages which met federal guidelines. Automatic watering devices provided easy accessability to fresh water at all times. A standard commercial 15% protein primate chow was fed twice daily. The temperature in the primate room was maintained at +25°C (±4°C) and the relative humidity between 50-60%.

Animal Groups and Treatments

Six of the primates were used to study the toxicity of CGP-4540, while the remaining 14 were involved in determining anti-schistosomal activity. In the toxicity study 2 male and 2 female animals were given two oral doses of 75 mg/kg of CGP-4540, one of which was accompanied by 50 mg/kg of erythromycin. Two animals received the drug alone for the initial treatment and were given the drug plus erythromycin four weeks later. Likewise, two animals received drug and erythromycin on the initial treatment and were given only drug on the crossover experiment. Two other animals (1 male and 1 female)served as control for the entire crossover experiment and received two doses of the CGP-4540-suspending vehicle.

In the efficacy study, 14 Cebus apella (7 males and 7 females) were divided into 3 groups and were infected with 3 different strains of schistosomes. Six primates were infected with 300 cercariae of Schistosoma mansoni (WRAIR strain), four with 100 cercariae of Schistosoma japonicum and four with 300 cercariae of Schistosoma haematobium (Egyptian strain). To test the

therapeutic efficacy of the drug, 10 mg/kg of CGP-4540 in a single oral dose was administered 70 days after S. mansoni infection and 50 days after S. japonicum infection. Two S. mansoni-infected animals received 50 mg/kg of erythromycin 5 minutes preceding the administration of CGP-4540. The other drug-treated animals received CGP-4540 without erythromycin. Two animals from each group (total of 6 animals) served as infected but untreated controls. The distribution of the primates into these studies and the details of their treatment are summarized in Table I.

Treatment

A formulation containing CGP-4540 in suspension and a sample of the CGP-4540-suspending vehicle were obtained from Ciba-Geigy, Basil, Switzerland. Erythromycin powder was provided by Dr. Ernest Bueding at Johns Hopkins University.

CGP-4540 was administered to all animals via gavage tube. Doses of 75 mg/kg were employed in the toxicity study and doses of 10 and 25 mg/kg in the efficacy study. In both studies,some animals were treated with 50 mg/kg of erythromycin administered orally to via gavage tube five minutes prior to the administration of the CGP-4540.

The CGP-4540 that was used came from batch 05/427/1. The suspension was stirred thoroughly before the amounts for treatment were taken. The powdered erythromycin was weighed, mixed with water, homogenized and prepared as oral stock suspension. The control animals received the same calculated dose of vehicle as that given the drug treated animals. The vehicle was used to wash through the gavage tube.

Clinical Observations

After each drug treatment, a 72 hour watch was conducted in

which vital signs, ECG, abnormal symptoms and behavioral changes were monitored and observed on the treated primates. Written records were kept of all observations every 4 hours for 3 days. Blood samples for clinical laboratory examination were drawn from all primates by venapuncture, using Vacutainers(R) and the serum was removed from coagulated centrifuged blood. In the toxicity study 2 pretreatment blood samples were taken and samples were then taken 24 hours after treatment and then weekly for four weeks following treatment. In the efficacy study bloods were taken on two occasions before infection, once or twice after infection, 24 hours after treatment and then weekly for four weeks after treatment. Urines were collected on the same schedule, but a composite 48 hour sample was collected after each drug treatment. Urines were collected with a urine pan and are subject to fecal and food contamination. Hematology and urinalysis were done at the University of Lowell Clinical Laboratories while the serology was done in the clinical laboratory at Lowell General Hospital. The Ames' test are being performed on urines at Johns Hopkins University. In the tabulated data being presented, values are reported as "0" if nothing appears in the blood or urine. A "-" indicates values unavailable, incomplete or not reported.

Fecal Examinations

Stool examinations begin early after each infection to ascertain the first appearance of schistosome eggs in either feces or urine. Examinations were done bi-weekly for the duration of the experiment. The AMS III technique is used for fecal exams. Urine was collected, centrifuged and the sediment is examined for schistosome eggs.

Pathology

The primates were sacrificed approximately four weeks after treatment with an intravenous injection of a heparinized

pentobarbital solution. Approximately 1 cc was injected into the vein for anesthetic purposes. Blood was collected via cardiac puncture for further studies. Euthanasia was completed with additional heparinized pentobarbital solution.

In infected animals, perfusion of animals for determining worm burdens was done on all animals. A normal saline solution was used for perfusion of the animal and the worms were collected for further studies. Necropsies with examination of external condition, all organs and tissues in the thoracic and abdominal cavities and head are performed on all sacrificed animals and those animals which expire unexpectedly. Tissue samples taken at necropsy for further microscopic examination were weighed and then preserved in 10% formalin solution.

Parafin-embedded sections will be prepared and stained with haematoxylin and eosin at the Clinical Laboratory, Lowell General Hospital. Examination and interpretation will be done at Johns Hopkins University.

Abbreviations

The abbreviations used in the tables accompanying this report are defined in the Appendix I.

Personnel

The following persons were responsible for conduct of portions of this study:

Dr. John I. Bruce - Principal Investigator
Dr. Chin-Tsong Lo - Parasitologist
Dr. Karen Crawford - Veterinarian
Dr. Joseph Farina - Co-ordinator of Clinical Laboratory Procedures
Dr. Emil Smith - Consultant/Toxicologist

RESULTS AND COMMENTS

Toxicity Study

With the exception of primate 642, the six animals in the toxicity experiment demonstrated little pathology or abnormal symptoms throughout the experimentation. Primate 642 died 1 day after the second treatment. She had received vehicle only. Necropsy revealed probably only half of her liver was functional, as a large thickly encased cyst comprised the remaining area. There were no indications of any relationship between the treatment and her death.

Observation made on the five animals that survived to necropsy were similar. Some intestinal irritation may have been produced by CGP-4540, since each primate that was given CGP-4540 had diarrhea ½ to 2 hours after administration, the color of the excrement being the same as the drug suspension itself (Table II).

Red blood cell values and indices decreased (Hct, Hb, RBC) to some degree in all animals, presumably from the frequency of blood collection (Table III). Most animals did, however, indicate a response to the induced anemia. Increased white blood counts, with neutrophils being the predominant cells, were noted (Table III).

Minor elevations of the liver enzyme were seen in some of the animals 24 hours after treatment, but these alterations were not seen consistently and were as common in the control animals as in the treated animals (Table IV). These values return to normal within 1 to 2 weeks.

No consistent abnormal results have been noted in the urinalyses (Table V). However, interpretation is difficult due to fecal contamination of the urine.

Since electrocardiograms were taken from the primates without

any sedative or tranquilizer being administered beforehand, muscle tremors and straining were seen on most of the EKG's. Basic interpretation for heart rates and rhythms were made; further interpretations will be made in the future. The initial examination of these EKG's suggests that the treatments did not modify either heart rate or rhythm.

The results of the necropsies conducted on all six animals are found in Table VII. There were no significant indications of any pathology referable to CGP-4540. Except for the diarrhea, the results of this toxicity study did not reveal any major problems or toxicity with CGP-4540 at oral doses of 75 mg/kg when administered alone or concurrently with 50 mg/kg of erythromycin.

Efficacy Study

To date, two of the 14 primates have died during this experiment. Their deaths came six and ten days after treatment. One animal was a control and the other had been treated with erythromycin and CGP-4540. Each animal apparently died from complications of the schistosomiasis infection. Severe hemorrhage was seen throughout the entire intestinal tract. Prior to their deaths, the stools contained little fecal matter and was essentially frank blood. The following comments concern primarily the 12 remaining animals.

No abnormal response or pathology was seen in *S. japonicum* and *S. mansoni* infected/treated animals at time of treatment. Some diarrhea and soft stools were observed in controls as well as drug treated. The intense yellow color of the feces that was seen with the toxicity animals was not present with 10 mg/kg treatment but was mildly seen again with 25 mg/kg retreatment.

Ten mg/kg of CGP-4540 did not have any apparent therapeutic effect on any of the infected animals as judged by fecal egg

counts (Table VIII). No reductions of egg counts were seen in either S. japonicum or S. mansoni infected animals. However, retreatment with 25 mg/kg of CGP-4540 gave the anticipated decrease in egg counts in both S. japonicum and S. mansoni infections.

To date, there have been no major changes in serology, hematology or urinalysis during the course of these experiments (Tables III, IV and V) although, in some animals, there were elevated WBC counts and/or reduction in RBC's, perhaps as a result of their infections.

Treatment was not associated with any changes in heart rate or cardiac rhythm (Table VI).

Except for the two animals that died during the experiment, all of the animals are presently alive. Necropsies of all remaining animals are scheduled in September.

The necropsies of the two animals which died are summarized in Table VII. This pathology appears to be directly related to the virulence of the infection and not to CGP-4540.

To the extent to which these experiments are complete, they would indicate that doses of 25 mg/kg of CGP-4540, but not doses of 10 mg/kg, produce significant antischistosomal effects in Cebus apella infected with S. japonicum and S. mansoni.

Completion of the Studies

With respect to completing these studies, necropsies are scheduled in September for the animals infected with S. japonicum and S. mansoni. Results of these necropsies should give the significant data pertinent for determining the efficacy of CGP-4540. In addition, the efficacy of 25 mg/kg of CGP-4540 in S. haematobium-infected animals will

be determined. Finally, experiments similar to those described in *Cebus apella* will be conducted in *Macaca mulatta*. The necessary animals are now in-house and these experiments will be started within the next few weeks.

Table I - Animal Groups, Treatments and Necropsies
(Cebus apella)

Experiment	Strain of Infection and Level	Monkey No. & Sex	Day of Infection Relevant to Rx	Date of $Rx_{(1)}$ and Dose	Date of $Rx_{(2)}$ and Dose	Necropsy Date
Toxicity Study	None	642 F	None	2/14/78 Vehicle	3/14/78 Vehicle	3/15/78
		557 M	"	"	"	4/18/78
		801 M	"	2/14/78 75 mg/kg of CGP-4540 & Vehicle	3/14/78 75 mg/kg of CGP-4540, 50 mg/kg Erythro-mycin	4/20/78
		674 F	"	"	3/14/78 75 mg/kg of CGP-4540, 50 mg/kg Erythro-mycin	"
		692 F	"	2/14/78 75 mg/kg CGP-4540, 50 mg/kg Erythro-mycin & Vehicle	3/14/78 75 mg/kg of CGP-4540	4/18/78
		476 M	"	"	"	4/20/78
Efficacy Study	S. mansoni (WRAIR) 300 cercariae	577 F	1/30/78	4/10/78 Vehicle	Died 4/20/78	4/20/78
		907 M	"	"	5/4/78 Vehicle	6/8/78

Note: Day 1 = Day of Treatment (Rx)

Table I - Animal Groups, Treatments and Necropsies
(Cebus apella)

Experiment	Strain of Infection and Level	Monkey No. & Sex	Day of Infection Relevant to Rx	Date of $Rx_{(1)}$ and Dose	Date of $Rx_{(2)}$ and Dose	Necropsy Date
Efficacy Study Cont'd		576 M	1/30/78	4/10/78 10 mg/kg SID X 1 Erythro-mycin 50 mg/kg	Died 4/16/78	4/16/78
		155 F	"	4/10/78 10 mg/kg SID X 1 Erythro-mycin 50 mg/kg SID X 1	5/4/78 25 mg/kg SID X 1 Erythro-mycin 50 mg/kg SID X 1	6/8/78
		565 F	"	4/10/78 10 mg/kg SID X 1	5/4/78 25 mg/kg SID X 1	"
		581 M	"	"	"	"
	S. japonicum (Philippine) 100 cercariae	475 M	3/2/78	4/20/78 Control Vehicle	5/4/78 Control Vehicle	6/9/78
		636 F	"	"	"	"
		489 M	"	4/20/78 10 mg/kg SID X 1	5/4/78 25 mg/kg SID X 1	"
		445 F	"	"	"	"
	S. haematobium (Egyptian) 300 cercariae	905 M	To be treated			Depend-ing on day of treat-ment

Note: Day 1 = Day of Treatment (Rx)

Table I - Animal Groups, Treatments and Necropsies
(Cebus apella)

Experiment	Strain of Infection and Level	Monkey No. & Sex	Day of Infection Relevant to Rx	Date of $Rx_{(1)}$ and Dose	Date of $Rx_{(2)}$ and Dose	Necropsy Date
	S. haematobium (Egyptian) 300 cercariae (Cont'd)	552 F	To be treated			Depending on day of treatment
		901 M	"			"
		551 F	"			"

Note: Day 1 = Day of Treatment (Rx)

Table II - Gross Observation at Time of Treatment in *Cebus apella*

Experiment	Strain of Infection	Monkey #	Date of Rx	Date of Observation	Observations
Toxicity Study: First Treatment	None	642	2/14/78	2/14-16/78	Green diarrhea 8 hrs. post Rx
		557	2/14/78	2/14-16/78	None
		801	2/14/78	2/14-16/78	1. 25 min. post Rx yellow diarrhea continuing for 8 hrs. 2. Vomit 12 hrs. post Rx
		674	2/14/78	2/14-16/78	25 min. post Rx yellow diarrhea continuing for 12 hrs.
		692	2/14/78	2/14-16/78	25 min. post Rx yellow diarrhea continuing for 8 hrs.
		476	2/14/78	2/14-16/78	25 min. post Rx yellow diarrhea continuing for 8 hrs.
Toxicity Study: Second Treatment	None	642	3/14/78	3/14-16/78	Expired 36 hrs. post Rx: symptoms unrelated to Rx
		557	3/14/78	3/14-16/78	None
		801	3/14/78	3/14-16/78	1. yellow diarrhea up to 8 hrs post Rx. 2. Signs of lethargy up to 12 hrs. post Rx
		674	3/14/78	3/14-16/78	Yellow diarrhea up to 24 hrs. post Rx
		692	3/14/78	3/14-16/78	Yellow diarrhea up to 4 hrs. post Rx.
		476	3/14/78	3/14-16/78	Yellow diarrhea up to 8 hrs. post Rx.
Efficacy Study: First Treatment	*S. mansoni* (WRAIR) strain 300	577	4/10/78	4/10-12/78	Soft stool up to 12 hrs. post Rx.
		907	4/10/78	4/10-12/78	Soft stool up to 8 hrs. post Rx
		576	4/10/78	4/10-12/78	Soft stool throughout observation period. Scrambled egg stool up to 8 hrs post Rx

Note: Day 1 = Day of Treatment (Rx)

Table II - Gross Observation at Time of Treatment in *Cebus apella*

Experiment	Strain of Infection	Monkey #	Date of Rx	Date of Observation	Observations
	S. japonicum (Philippine strain) 100 cercariae	155	4/10/78	4/10-12/78	vomit 4 hrs. post Rx
		565	4/10/78	4/10-12/78	soft stool throughout observation period
		581	4/10/78	4/10-12/78	soft stool throughout observation period
		475	4/20/78	4/20-22/78	diarrhea up to 12 hrs. post Rx
		636	4/20/78	4/20-22/78	soft stool up to 12 hrs. post Rx
		489	4/20/78	4/20-22/78	1. vomit right after Rx 2. scrambled egg stool throughout observation period
		445	4/20/78	4/20-22/78	1. soft stool up to 12 hrs. post Rx 2. some signs of anorexia 52-80 hrs. post Rx.
Efficacy Study: Retreatment	*S. mansoni* (WRAIR strain) 300 cercariae	907	5/4/78	5/4-6/78	None
		155	5/4/78	5/4-6/78	yellow mucus stool 1-8 hrs. post Rx
		565	5/4/78	5/4-6/78	scrambled egg stool 1-4 hrs. post Rx
		581	5/4/78	5/4-6/78	scrambled egg stool 1-4 hrs. post Rx
	S. japonicum (Philippine strain) 100 cercariae	475	5/4/78	5/4-6/78	some soft stool throughout observation period
		636	5/4/78	5/4-6/78	some soft stool throughout observation period
		489	5/4/78	5/4-6/78	yellow mucus stool through 8 hrs. post Rx. Soft stool throughout observation period.
		445	5/4/78	5/4-6/78	1. soft yellow stool up to 12 hrs. post Rx. Soft stool throughout observa-

Note: Day 1 = Day of Treatment (Rx)

Table II - Gross Observation at Time of Treatment in *Cebus apella*

Experiment	Strain of Infection	Monkey #	Date of Rx	Date of Observation	Observations
cont'd		445 cont'd	5/4/78	5/4-5/6/78	tion period. 2. anorexia throughout observation period. 3. signs of sluggishness and depression throughout observation period.

Note: Day 1 = Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 642

Monkey Number 642

Sex F

Experiment AID - Toxicity

Infection None

Route and Regimen Oral - Vehicle only

			*				**						
Date	1-17	1-27	2-15	2-21	2-28	3-7	3-15						
Day Rx	-29	-19	+1	+7	+14	+21	+1						
Hct %	36.6	37.5	35.1	36.6	35.8	32.2	34.5						
Hglb	11.2	12.6	10.6	11.0	11.2	10.1	10.5						
RBC X 10^6	4.86	5.0	4.73	4.77	4.75	4.43	4.67						
WBC X 10^3	12.3	7.0	11.7	7.6	6.1	6.5	6.2						
Differential: Neut., 1	0	0	0	3	0	0	0						
Differential: Neut., M	62	59	80	68	63	65	69						
Differential: Lymph.	27	32	17	26	29	30	24						
Differential: Mon.	8	9	3	2	2	4	5						
Differential: Eo.	1	0	0	0	0	0	1						
Differential: Baso.	2	0	0	1	1	1	1						
Differential: Atyp. Lymph.	0	0	0	0	0	0	0						
Retic.	2.0%	2.3%	1.8%	6.1%	1.2%	1.9%	3.8%						
Prothrombin	ND	ND	ND	19.0/13.0	12.5/12.5	13.5/15.0	14.0/13.5						
Morphology 1, 2, 3, 4													
Polychrom.	2	2	1	1	0	0	1						
Hypochrom	0	0	0	0	2	1	2						
Poik	0	1	0	0	1	1	3						
Target	0	0	0	0	0	0	0						
Sphero	0	0	0	0	0	0	0						
Aniso	0	2	1	2	2	1	2						
Micro	3	2	0	1	0	2	2						
Macro	0	0	0	0	0	0	0						
Baso. Stip	0	0	0	0	0	0	0						
Vacuoles	0	0	0	0	0	0	0						
Toxic Gran.	0	0	0	0	0	0	0						
Sickle Cells	0	0	0	0	0	0	0						
MCV u^3	76	75	75	77	75	74	75						
MCH uug	23	25.2	22.4	23.0	23.5	22.7	22.5						
MCHC %	30.6	33.6	30.2	30.0	31.2	31.3	30.4						

Comments: Animal expired 32 hours after treatment. (8 hours after blood taken) Indications are hypoglycemia, a liver stress and shock which seem to be unrelated to drug treatment. 1/2 of the liver was comprised of a large cyst and fibrotic tissue.

*-24 hours post $Rx_{(1)}$-vehicle. **-24 hours post $Rx_{(2)}$-vehicle.

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 557

Monkey Number 557

Sex M

Experiment AID - Toxicity

Infection None

Route and Regimen Oral - Vehicle only

			*				**				
Date	1-17	1-27	2-15	2-21	2-28	3-7	3-15	3-22	3-29	4-5	4-12
Day Rx	-29	-19	+1	+7	+14	+21	+1	+8	+15	+22	+29
Hct %	53.3	52.0	51.4	48.0	53	51.3	46.5	44.2	44.8	46.4	46.7
Hglb	17.3	17.4	16.0	14.9	16.8	16.1	14.4	14.1	14.9	15.3	15.3
RBC X 10^6	6.76	6.46	6.45	6.05	6.6	6.55	6.03	5.69	5.82	6.0	6.05
WBC X 10^3	7.2	7.6	12.4	8.0	6.1	5.8	8.7	5.6	5.2	5.2	5.4
Differential: Neut., 1	1	0	0	0	0	0	2	0	0	0	0
Differential: Neut., M	32	39	78	59	55	43	64	48	68	33	32
Differential: Lymph.	61	57	20	35	51	55	34	50	23	65	65
Differential: Mon.	4	4	0	6	3	2	0	1	8	0	1
Differential: Eo.	2	0	0	0	1	0	0	1	0	0	2
Differential: Baso.	0	0	2	0	0	0	0	0	1	2	0
Differential: Atyp. Lymph.	0	0	0	0	0	0	0	0	0	0	0
Retic.	0.3%	1.0%	0.2%	0.8%	1.1%	0.5%	0.7%	2.0%	2.6%	0.3%	2.2%
Prothrombin	ND	ND	ND	ND	12.5/13.5	QNS	14.0/14.0	QNS	14.5/13.5	14.0/15.0	13.0/10.0
Morphology 1, 2, 3, 4											
Polychrom.	0	1	0	0	0	1	0	1	0	0	0
Hypochrom	0	0	0	0	0	0	0	0	2	0	0
Poik	0	0	0	0	1	0	1	0	1	0	0
Target	0	0	0	0	0	0	0	0	0	0	0
Sphero	0	0	0	0	0	0	0	0	0	0	0
Aniso	0	0	1	1	2	1	1	0	0	0	0
Micro	0	0	0	0	0	0	0	0	2	0	0
Macro	0	0	0	0	0	0	0	0	0	0	0
Baso. Stip	0	0	0	0	0	0	0	0	0	0	0
Vacuoles	0	0	0	0	0	0	0	0	0	0	0
Toxic Gran.	0	0	0	0	0	0	0	0	0	0	0
Sickle Cells	0	0	0	0	0	0	0	0	0	0	0
MCV u^3	79	81	80	80	80	79	78	78	77	78	77
MCH mg	25.6	26.9	24.8	24.6	25.4	24.5	23.9	25	25.6	25.5	25.2
MCHC %	32.3	33.4	31.1	31.0	31.6	31.3	31	31.9	33.2	32.9	32.7

Comments:

*-24 hours post $Rx_{(1)}$ - vehicle

**-24 hours post $Rx_{(2)}$ - vehicle

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 801

Monkey Number 801

Sex M

Experiment AID-Toxicity

Infection None

Route and Regimen Oral 50 mg/kg Erythromycin

75 mg/kg CGP-4540

				*				**				
Date		1/17	1/27	2/15	2/21	2/28	3/7	3/15	3/23	3/29	4/5	4/12
Day Rx		-29	-19	+1	+7	+14	+21	+1	+8	+15	+22	+29
Hct %		42	39.2	47.5	44.1	43.3	41.5	39.1	38.3	37.0	38.4	33.0
Hglb		13.1	13.7	14.6	13.6	13.5	12.8	11.9	11.8	11.9	12.4	10.3
RBC X 10^6		5.27	4.92	6.0	5.49	5.47	5.35	5.07	4.88	4.87	5.08	4.42
WBC X 10^3		9.1	9.0	10.5	12.0	8.9	6.5	8.5	9.3	9.6	8.6	14.1
Differential	Neut., 1	0	0	0	0	0	0	0	0	0	0	0
	Neut., M	51	57	59	57	51	49	50	42	56	51	38
	Lymph.	43	38	39	38	42	49	46	55	39	47	58
	Mon.	4	2	2	5	6	1	4	2	2	0	1
	Eo.	2	3	0	0	0	0	0	1	2	0	3
	Baso.	0	0	0	0	0	1	0	0	1	1	0
	Atyp. Lymph.	0	0	0	0	many	0	0	0	0	0	0
Retic. %		0.6	2.4	0.4	2.7	1.0	0.8	1.9	2.9	1.7	0.4	2.4
Prothrombin		N.D.	N.D.	N.D.	QNS	12.5/14.0	14.0/13.0	14.0/12.0	QNS	14.5/14.0	14.0/12.0	13.0/10.5
Morphology												
1, 2, 3, 4												
Polychrom.		0	1	0	0	0	0	0	0	1	1	0
Hypochrom		0	0	0	0	0	2	2	1	2	0	0
Poik		1	1	0	1	0	1	2	0	1	0	0
Target		0	0	0	0	0	0	0	0	0	0	0
Sphero		0	0	0	0	0	0	0	0	0	0	0
Aniso		1	1	1	1	0	0	1	1	2	1	1
Micro		0	0	0	0	0	2	2	0	2	0	0
Macro		0	0	0	0	0	0	0	0	0	0	0
Baso. Stip		0	0	0	0	0	0	0	0	0	0	0
Vacuoles		0	0	0	0	0	0	0	0	0	0	0
Toxic Gran.		0	0	0	0	0	0	0	0	0	0	0
Sickle Cells		0	0	0	0	0	0	0	0	0	0	0
MCV u^3		80	80	79	81	80	78	78	80	76	76	75
MCH uug		24.8	27.8	24.3	24.7	24.6	23.9	23.5	24.1	24.4	21.3	23.3
MCHC %		31.2	34.9	30.7	33.1	31.1	30.8	30.4	30.8	32.2	32.2	31.2

Comments:

* 24 hours post Rx(1) CGP-4540

** 24 hours post Rx(2) CGP-4540 & Erythromycin

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 674

Monkey Number 674

Sex F

Experiment AID - Toxicity

Infection None

Route and Regimen Oral-75 mg/kg CGP-4540 + 75 mg/kg Erythromycin

			*				**				
Date	1-17	1-27	2-15	2-21	2-28	3-7	3-15	3-22	3-29	4-5	4-12
Day Rx	-29	-19	+1	+7	+14	+21	+1	+8	+15	+22	+29
Hct %	45.3	42.7	48.5	47.8	46.5	50.9	43.9	40.4	40.7	45.7	45.6
Hglb	14.5	13.8	14.8	14.6	14.8	16.1	13.7	12.3	12.9	14.9	15.1
RBC X 10^6	5.44	5.12	5.72	5.51	5.48	6.05	5.33	4.74	4.71	5.21	5.38
WBC X 10^3	7.45	12.0	9.20	11.9	4.3	6.8	7.6	7.4	5.4	6.3	9.0
Differential: Neut., 1	0	0	0	0	0	0	0	0	0	0	0
Neut., M	41	65	64	57	44	68	76	48	49	41	59
Lymph.	50	21	29	40	54	25	22	48	49	56	38
Mon.	5	14	4	2	0	6	2	2	1	3	1
Eo.	3	0	0	0	0	0	0	0	0	0	1
Baso.	1	0	0	1	0	1	0	2	1	0	1
Atyp. Lymph.	0	0	0	0	0	0	0	0	0	0	0
Retic.	0.5%	1.4%	1.6%	2.7%	0.4%	0.6%	0.5%	4.4%	4.0%	1.6%	0.4%
Prothrombin	ND	ND	16.9/ 20.0	19.0/ 10.0	12.5/ 14.0	13.5/ 14.0	14.0/ 12.5	QNS	14.5/ 13.0	14.0/ 12.0	13.0/ 11.0
Morphology 1, 2, 3, 4											
Polychrom.	0	1	1	1	1	0	0	1	1	2	0
Hypochrom	0	0	0	0	0	0	0	0	0	0	0
Polk	0	0	0	0	0	0	0	1	0	1	0
Target	0	0	0	0	0	0	0	0	0	0	0
Sphero	0	0	0	0	0	0	0	0	0	0	0
Aniso	0	0	1	1	0	0	1	1	1	1	0
Micro	0	0	0	0	0	0	2	0	0	0	0
Macro	0	0	0	0	0	0	0	0	0	0	0
Baso. Stip	0	0	0	0	0	0	0	0	0	0	0
Vacuoles	0	0	0	0	0	0	0	0	0	0	0
Toxic Gran.	0	0	0	0	0	0	0	0	0	0	0
Sickle Cells	0	0	0	0	0	0	0	0	0	0	0
MCV u^3	83	83	85	87	85	85	83	86	87	87	85
MCH uug	26.6	26.9	25.8	26.4	27.0	26.6	25.7	29.4	27.3	28.5	28.0
MCHC %	32.0	32.3	30.5	30.5	31.8	31.6	31.2	30.4	31.6	32.6	33.1

Comments:

*-24 hours post $Rx_{(1)}$ - CGP-4540

**-24 hours post $Rx_{(2)}$ - CGP-4540 + Erythromycin

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in Cebus apella Monkey # 692

Monkey Number 692

Sex F

Experiment AID-Toxicity

Infection None

Route and Regimen Oral 75 mg/kg CGP-4540
50 mg/kg Erythromycin

			*				**						
Date	1/17	1/27	2/15	2/21	2/28	3/7	3/15	3/22	3/27	4/5	4/12		
Day Rx	-29	-14	+2	+8	+15	+2	+2	+9	+16	+23	+30		
Hct %	42.5	-	44.2	42.8	45.0	40.2	37.6	44.8	42.5	43.2	47.2		
Hglb	13.9	--	13.5	13.6	13.9	12.7	11.2	13.7	13.9	14.1	14.8		
RBC X 10^6	5.42	-	5.55	5.28	5.59	5.02	4.7	5.21	5.11	5.23	5.74		
WBC X 10^3	5.0	-	8.6	7.2	5.7	4.7	8.4	4.6	7.7	4.6	5.6		
Differential: Neut., 1	1	-	0	0	0	0	0	0	1	0	0		
Differential: Neut., M	28	-	56	42	36	28	63	49	22	39	61		
Differential: Lymph.	65	-	44	53	57	72	33	50	73	58	36		
Differential: Mon.	3	-	0	5	3	0	2	0	3	0	1		
Differential: Eo.	2	-	0	0	1	0	0	1	0	0	2		
Differential: Baso.	1	-	0	0	1	0	0	0	1	3	0		
Differential: Atyp. Lymph.	0	-	0	0	0	0	0	0	0	0	0		
Retic. %	0.3	-	0.2	2.2	1.1	0.6	0.8	2.5	1.4	0.6	0.7		
Prothrombin	N.D.	-	N.D.	19.0/15.0	12.5/14.0	14.0/14.0	QNS	QNS	14.5/16.0	14.0/14.0	13.0/9.0		
Morphology		-											
1, 2, 3, 4		-											
Polychrom.	1	-	0	0	0	0	1	0	1	0	0		
Hypochrom	0	-	0	0	0	0	0	0	2	0	0		
Poik	0	-	0	0	0	0	1	0	1	0	0		
Target	0	-	0	0	0	0	0	0	0	0	0		
Sphero	0	-	0	0	0	0	0	0	0	0	0		
Aniso	1	-	1	1	0	1	1	1	1	1	0		
Micro	0	-	0	0	0	0	0	0	2	0	0		
Macro	0	-	0	0	0	0	0	0	0	0	0		
Baso. Stip	0	-	0	0	0	0	0	0	0	0	0		
Vacuoles	0	-	0	0	0	0	0	0	0	0	0		
Toxic Gran.	0	-	0	0	0	0	0	0	0	0	0		
Sickle Cells	0	-	0	0	0	0	0	0	0	0	0		
MCV u^3	79	-	80	81	81	81	81	86	83	83	82		
MCH uug	25.6	-	24.3	25.7	24.8	25.2	23.8	26.3	27.2	26.9	25.7		
MCHC %	32.7	-	30.5	31.7	30.8	31.5	29.8	30.6	32.7	32.3	31.3		

Comments:

* 24 hours post Rx(1) CGP-4540 & Erythromycin

** 24 hours post Rx(2) CGP-4540 alone

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 476

Monkey Number 476

Sex M

Experiment AID-Toxicity

Infection None

Route and Regimen Oral 75 mg/kg CGP-4540
50 mg/kg Erythromycin

			*				**						
Date	1/17	1/27	2/15	2/21	2/28	3/7	3/15	3/22	3/29	4/5	4/12		
Day Rx	-29	-19	+1	+7	+14	+21	+1	+8	+15	+22	+29		
Hct %	47.6	47.9	44.1	43.7	41.5	42.9	40.8	41.3	44.8	46.3	44.9		
Hglb	15	16.5	13.6	13.4	13.2	13.2	12.6	12.9	14.6	15.3	14.6		
RBC X 10^6	6.06	5.99	5.69	5.50	5.32	5.46	5.16	5.23	5.59	5.81	5.65		
WBC X 10^3	4.00	3.80	6.00	6.30	4.70	3.80	4.20	4.20	4.90	2.90	3.80		
Differential: Neut., 1	0	0	0	0	0	0	0	1	0	0	0		
Differential: Neut., M	32	29	40	56	34	34	52	12	25	15	24		
Differential: Lymph.	59	64	45	41	62	65	45	84	74	83	75		
Differential: Mon.	7	1	5	3	2	0	3	2	0	1	0		
Differential: Eo.	2	5	1	0	1	0	0	1	0	1	1		
Differential: Baso.	0	1	1	0	1	1	0	0	1	0	0		
Differential: Atyp. Lymph.	0	0	0	0	0	0	0	0	0	0	0		
Retic. %	1.3	1.0	0.6	1.7	1.4	1.9	2.1	3.1	2.2	1.0	1.4		
Prothrombin	N.D.	N.D.	N.D.	QNS	12.5/17.0	13.5/14.0	14.0/13.0	QNS/15.0	14.5/15.0	14.0/14.5	13.0/10.0		
Morphology 1, 2, 3, 4													
Polychrom.	1	0	0	1	0	0	1	1	1	0	0		
Hypochrom	0	0	0	0	0	0	1	0	0	0	0		
Polk	0	0	1	0	0	0	1	0	0	0	0		
Target	0	0	0	0	0	0	0	0	0	0	0		
Sphero	0	0	0	0	0	0	0	0	0	0	0		
Aniso	1	0	1	1	0	1	2	1	1	0	0		
Micro	0	0	0	0	0	0	2	0	0	0	0		
Macro	0	0	0	0	0	0	0	0	0	0	0		
Baso. Stip	0	0	0	0	0	0	0	0	0	0	0		
Vacuoles	0	0	0	0	0	0	0	0	0	0	0		
Toxic Gran.	0	0	0	0	0	0	0	0	0	0	0		
Sickle Cells	0	0	0	0	0	0	0	0	0	0	0		
MCV u^3	79	79	78	80	81	79	80.0	80	80	80	80		
MCH uug	24.7	27.5	23.9	24.3	24.8	24.1	24.4	25	26.1	26.3	25.8		
MCHC %	31.5	34.4	30.8	30.6	31.8	30.7	30.8	31	32.5	33.0	32.6		

Comments: * 24 hours post Rx(1) Drug & Erythromycin
** 24 hours post Rx(2) Drug alone

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 577

Monkey Number 577

Sex F

Experiment AID-Efficacy control

Infection *S. mansoni* (WRAIR) 1/30

Route and Regimen Oral Vehicle only

						*							
Date	1/18	1/23	1/30	2/13	3/6	4/11	4/18	4/20					
Day Rx	-82	-79	-70	-56	-35	+1	+8	+10					
Hct %	-	40.2	43.9	40.5	46.2	35.7	32.8	Died					
Hglb	-	12.3	13.8	12.3	14.4	12.0	11.0						
RBC X 10^6	-	5.23	5.51	5.17	5.80	4.84	4.31						
WBC X 10^3	-	9.1	7.2	7.9	8.1	3.8	3.8						
Differential: Neut., 1	-	0	0	0	0	0	0						
Neut., M	-	39	38	16	45	8	39						
Lymph.	-	58	59	78	52	88	57						
Mon.	-	2	3	3	2	4	3						
Eo.	-	1	0	1	0	0	1						
Baso.	-	0	0	2	1	0	0						
Atyp. Lymph.	-	0	0	0	0	0	0						
Retic. %	-	1.3	2.0	1.1	1.0	1.5	0.4						
Prothrombin	-	N.D.	N.D.	N.D.	QNS	QNS	QNS						
Morphology													
1, 2, 3, 4													
Polychrom.	-	2	1	0	0	1	0						
Hypochrom	-	0	0	0	0	0	0						
Polk	-	2	2	2	0	0	0						
Target	-	0	0	0	0	0	0						
Sphero	-	0	0	0	0	0	0						
Aniso	-	2	1	1	1	1	0						
Micro	-	1	2	2	0	1	0						
Macro	-	0	0	0	0	1	0						
Baso. Stip	-	0	0	0	0	0	0						
Vacuoles	-	0	0	0	0	0	0						
Toxic Gran.	-	0	0	0	0	0	0						
Sickle Cells	-	0	0	0	0	0	0						
MCV u^3	-	77	79	79	80	74	76						
MCH uug	-	23.5	24.5	23.7	24.8	24.7	25.5						
MCHC %	-	30.5	31.8	30.3	31.1	33.6	33.5						

Comments: NRBC/100 wbc 3

* 24 hours post Rx(1)-Vehicle only

Note: Day 1=Day of Treatment (Rx)

Rx_1=4/10

Rx_2=5/4

Table III Summary of Hematology

in *Cebus apella* Monkey # 907

Monkey Number 907

Sex M

Experiment AID-Efficacy control

Infection *S. mansoni* (WRAIR) 1/30

Route and Regimen Oral-Vehicle only

Date	1/18	1/30	2/13	3/6	4/11 *	4/18	4/25	5/2					
Day Rx	-82	-70	-56	-35	+2	+9	+16	+24					
Hct %	43.1	46.6	49.0	44.8	41.4	42.9	46.1	40.0					
Hglb	12.2	14.4	14.8	13.7	13.4	13.9	14.1	11.9					
RBC X 10^6	4.98	5.38	5.76	5.37	5.16	5.13	5.54	4.88					
WBC X 10^3	10.7	10.1	8.0	8.1	13.3	13.9	9.3	11.3					
Differential: Neut., 1	0	0	1	0	0	0	0	0					
Differential: Neut., M	36	23	26	40	41	53	32	59					
Differential: Lymph.	61	72	69	58	57	41	62	40					
Differential: Mon.	3	3	4	0	2	6	5	1					
Differential: Eo.	0	2	0	0	0	0	1	0					
Differential: Baso.	0	0	0	2	0	0	0	0					
Differential: Atyp. Lymph.	0	**	0	0	0	0	0	0					
Retic. %	0.2	1.0	0.5	1.2	1.9	2.8	4.0	0.6					
Prothrombin	N.D.	N.D.	N.D.	20.0/ 14.0	15.0/ 13.5	13.5/ 13.0	15.0/ 14.5	15.0/ 14.0					
Morphology 1, 2, 3, 4													
Polychrom.	0	0	0	0	0	0	2	0					
Hypochrom	0	0	0	0	0	0	3	1					
Polk	0	0	0	0	0	0	2	1					
Target	0	0	0	0	0	0	0	0					
Sphero	0	0	0	0	0	0	0	0					
Aniso	0	0	0	1	1	0	2	1					
Micro	0	0	0	0	0	0	0	0					
Macro	0	0	0	0	0	0	0	0					
Baso. Stip	0	0	0	0	0	0	0	0					
Vacuoles	0	0	0	0	0	0	0	0					
Toxic Gran.	0	0	0	0	0	0	0	0					
Sickle Cells	0	0	0	0	0	0	0	0					
MCV u^3	86	86	85	84	80	84	83	82					
MCH uug	24.5	26.8	25.6	25.5	25.9	27.0	25.4	24.3					
MCHC %	28.3	30.9	30.2	30.5	32.5	32.4	30.5	29.7					

Comments: * 24 hours post Rx(1)-Vehicle only

** large lymph c granules

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in Cebus apella Monkey # 576

Monkey Number 576

Sex M

Experiment AID-Efficacy

Infection S. mansoni (WRAIR) 1/30

Route and Regimen Oral-Drug & Erythromycin

					*								
Date	1/18	1/30	2/13	3/6	4/11	4/16							
Day Rx	-82	-70	-56	-35	+2	+7							
Hct %	49.9	46.5	46.4	45.7	35.3	Died							
Hglb	14.8	14.5	14.2	14.4	11.4								
RBC X 10^6	6.06	5.32	5.52	5.42	4.54								
WBC X 10^3	8.0	7.9	7.5	7.1	7.4								
Differential: Neut., 1	0	0	1	0	0								
Differential: Neut., M	19	33	41	38	69								
Differential: Lymph.	79	62	56	53	28								
Differential: Mon.	2	4	2	8	3								
Differential: Eo.	0	1	0	0	0								
Differential: Baso.	0	0	0	1	0								
Differential: Atyp. Lymph.	0	**	0	0	0								
Retic. %	0.4	1.2	1.0	0.8	3.4								
Prothrombin	N.D.	N.D.	N.D.	20.0/ 18.0	N.R.								
Morphology													
1, 2, 3, 4													
Polychrom.	0	1	0	1	1								
Hypochrom	0	0	0	0	1								
Polk	0	1	0	0	1								
Target	0	0	0	0	0								
Sphero	0	0	0	0	0								
Aniso	0	1	0	1	2								
Micro	0	0	0	0	1								
Macro	0	0	0	0	1								
Baso. Stip	0	0	0	0	0								
Vacuoles	0	0	0	0	0								
Toxic Gran.	0	0	0	0	0								
Sickle Cells	0	0	0	0	0								
MCV u^3	83	89	84	84	78								
MCH uug	24.4	27	25.7	26.5	25.1								
MCHC %	29.6	31.5	30.6	31.5	32.2								

Comments:

* 24 hours post Rx(1) 10 mg/kg CGP-4540 & 50 mg/kg Erythromycin

** large lymph c red granules

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 155

Monkey Number 155

Sex F

Experiment AID-Efficacy

Infection S. mansoni (WRAIR) 1/30

Route and Regimen Oral-Drug & Erythromycin

Date	1/18	1/30	2/13	3/6	4/11*	4/18	4/25	5/2					
Day Rx	-82	-70	-56	-35	+1	+8	+15	+22					
Hct %	47.4	45.7	46.7	48	43.5	42.1	42.2	42.8					
Hglb	15.0	14.7	14.2	14.9	14.3	13.4	14.5	12.8					
RBC X 10^6	6.17	5.86	5.89	6.01	5.67	5.30	5.30	5.38					
WBC X 10^3	7.0	7.8	4.9	6.9	13.8	12.9	9.1	6.1					
Differential: Neut., 1	0	1	0	0	0	0	0	0					
Differential: Neut., M	44	29	27	37	40	40	33	26					
Differential: Lymph.	51	64	70	60	57	54	62	74					
Differential: Mon.	4	5	1	1	2	1	1	0					
Differential: Eo.	0	1	1	0	1	5	1	0					
Differential: Baso.	1	0	1	2	0	0	3	0					
Differential: Atyp. Lymph.	0	0	0	0	0	0	0	0					
Retic. %	0.5	0.7	1.8	0.5	0.6	2.6	5.6	1.2					
Prothrombin	N.D.	N.D.	N.D.	QNS	N.R.	13.5/ 11.0	15.0/ 13.0	15.0/ 14.0					
Morphology 1, 2, 3, 4													
Polychrom.	0	0	0	0	1	rare	2	1					
Hypochrom	0	0	0	0	0	0	0	0					
Poik	0	0	0	1	1	0	1	0					
Target	0	0	0	0	0	0	0	0					
Sphero	0	0	0	0	0	0	0	0					
Aniso	0	0	1	1	1	1	1	0					
Micro	0	0	0	0	0	0	0	0					
Macro	0	0	0	0	0	0	0	0					
Baso. Stip	0	0	0	0	0	0	0	0					
Vacuoles	0	0	0	0	0	0	0	0					
Toxic Gran.	0	0	0	0	0	0	0	0					
Sickle Cells	0	0	0	0	0	0	0	0					
MCV u^3	77	79	80	80	77	80	80	80					
MCH uug	24.3	25.1	24.1	24.7	25.2	25.2	27.3	23.8					
MCHC %	31.6	32.0	30.4	31.0	32.8	31.8	24.3	29.8					

Comments:

*24 hours post Rx(1) 10 mg/kg CGP-4540 & 50 mg/kg Erythromycin

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 565

Monkey Number 565

Sex F

Experiment AID - Efficacy

Infection S. Mansoni (WRAIR) 1/30

Route and Regimen Oral - drug only

Date	1-18	1-30	2-13	3-6	4-11*	4-18	4-25	5-2					
Day Rx	-82	-70	-56	-35	+2	+9	+16	+23					
Hct %	50.3	47.8	47.6	49.2	42.2	44.0	44.4	43.5					
Hglb	15.9	15.5	14.9	15.7	14.1	14.3	14.6	13.0					
RBC X 10^6	5.84	5.49	5.56	5.68	5.12	5.27	5.19	5.11					
WBC X 10^3	5.9	8.9	4.2	6.2	11.8	9.35	8.3	5.9					
Differential: Neut., 1	0	0	0	0	0	0	0	0					
Differential: Neut., M	47	53	34	53	59	43	56	33					
Differential: Lymph.	47	38	57	39	37	53	37	60					
Differential: Mon.	6	8	7	3	2	1	4	4					
Differential: Eo.	0	0	0	0	0	1	3	1					
Differential: Baso.	0	1	2	5	2	2	0	2					
Differential: Atyp. Lymph.	0	0	0	0	0	0	0	0					
Retic. (%)	0.5	1.4	1.1	0.1	2.0	2.4	3.8	2.2					
Prothrombin	ND	ND	ND	QNS	15.0/ 12.0	13.5/ 16.5	15.0/ 12.0	15.0/ 11.0					
Morphology 1, 2, 3, 4													
Polychrom.	0	0	0	0	0	1	2	1					
Hypochrom	0	0	0	0	0	0	2	0					
Poik	0	0	0	0	1	0	2	0					
Target	0	0	0	0	0	0	0	0					
Sphero	0	0	0	0	0	0	0	0					
Aniso	0	0	1	1	1	1	2	0					
Micro	0	0	0	0	0	0	0	0					
Macro	0	0	0	0	0	0	0	0					
Baso. Stip	0	0	0	0	0	0	0	0					
Vacuoles	0	0	0	0	0	0	0	0					
Toxic Gran.	0	0	0	0	0	0	0	0					
Sickle Cells	0	0	0	0	0	0	0	0					
MCV u^3	86	85	86	87	82	83	86	86					
MCH uug	27.2	28.1	26.7	27.6	27.5	27.1	27.9	25.4					
MCHC %	31.6	32.2	31.0	31.9	33.4	32.5	32.9	29.8					

Comments: *24 hours post $Rx_{(1)}$ - 10 mg/kg CGP - 4540

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 581

Monkey Number 581

Sex M

Experiment AID - Efficacy

Infection S. Mansoni (WRAIR) 1/30

Route and Regimen Oral - drug only

Date	1-18	1-30	2-13	3-6	4-11*	4-18	4-25	5-2					
Day Rx	-82	-70	-56	-35	+2	+9	+16	+23					
Hct %	47.4	41.2	47.9	49.3	38.2	38.8	41.5	42.1					
Hglb	14.8	14.9	14.8	15.5	12.3	12.4	14.1	12.3					
RBC X 10^6	5.85	5.17	5.86	6.07	4.95	4.88	5.26	5.43					
WBC X 10^3	8.9	10.1	7.7	7.0	9.9	10.8	9.2	6.6					
Differential: Neut., 1	0	0	0	0	0	0	0	0					
Differential: Neut., M	20	30	25	36	37	35	33	40					
Differential: Lymph.	74	66	75	62	59	63	56	55					
Differential: Mon.	3	1	0	2	4	1	11	5					
Differential: Eo.	3	0	0	0	0	1	0	0					
Differential: Baso.	0	0	0	0	0	0	0	0					
Differential: Atyp. Lymph.	0	2	0	0	0	0	0	0					
Retic. (%)	0.7	2.4	0.5	0.7	2.0	2.5	5.8	3.9					
Prothrombin	ND	0	0	QNS	15.0/14.5	13.5/14.0	15.0/13.5	R.R.					
Morphology 1, 2, 3, 4		Blast											
Polychrom.	0	1	0	0	0	Rare	1	1					
Hypochrom	0	0	0	0	0	0	2	2					
Polk	0	1	0	0	0	0	2	1					
Target	0	0	0	0	0	0	0	0					
Sphero	0	0	0	0	0	0	0	0					
Aniso	0	1	1	1	1	1	1	1					
Micro	0	1	0	0	0	0	0	0					
Macro	0	0	0	0	0	0	0	0					
Baso. Stip	0	0	0	0	0	0	0	0					
Vacuoles	0	0	0	0	0	0	0	0					
Toxic Gran.	0	0	0	0	0	0	0	0					
Sickle Cells	0	0	0	0	0	0	0	0					
MCV u^3	81	79	82	82	77	80	79	78					
MCH uug	25.3	28.8	25.2	25.5	24.8	25.4	26.8	22.6					
MCHC %	31.2	36.0	30.8	31.4	32.1	31.9	33.9	29.2					

Comments: *24 hours post Rx(1) - 10 mg/kg CGP - 4540

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 475

Monkey Number 475

Sex M

Experiment AID - Efficacy Control

Infection S. Japonicum (Philippines) 3/2

Route and Regimen Oral - vehicle only

						*							
Date		1-19	2-23	3-16	4-5	4-21	4-26						
Day Rx		-91	-57	-35	-15	+2	+7						
Hct %		51.7	55.6	52.9	54.4	51.1	49.0						
Hglb		16.6	17.1	16.8	17.9	16.3	14.6						
RBC X 10^6		6.48	6.72	6.56	6.70	6.27	6.10						
WBC X 10^3		8.1	7.2	9.2	9.2	12.2	17.5						
Differential	Neut., 1	1	0	0	0	0	0						
	Neut., M	28	34	57	60	67	80						
	Lymph.	63	61	39	38	24	16						
	Mon.	6	2	3	2	7	4						
	Eo.	1	1	0	0	2	0						
	Baso.	1	2	1	0	0	0						
	Atyp. Lymph.	0	0	0	0	0	0						
Retic. (%)		0.4	1.2	0.5	0.5	0.2	0.8						
Prothrombin		ND	NR	17.0/19.0	14.0/17.0	13.5/14.0	15.0/13.0						
Morphology													
1, 2, 3, 4													
Polychrom.		0	0	0	0	0	0						
Hypochrom		0	0	0	0	1	2						
Polk		1	0	0	0	0	1						
Target		0	0	0	0	0	0						
Sphero		0	0	0	0	0	0						
Aniso		1	0	0	0	0	0						
Micro		0	0	0	0	0	0						
Macro		0	0	0	0	0	0						
Baso. Stip		0	0	0	0	0	0						
Vacuoles		0	0	0	0	0	0						
Toxic Gran.		0	0	0	0	0	0						
Sickle Cells		0	0	0	0	0	0						
MCV u^3		81	83	81	81	81	81						
MCH uug		25.6	25.4	25.6	26.7	25.9	23.9						
MCHC %		32.2	30.7	31.8	32.9	31.8	29.7						
Comments:													
NRBC/100WBC		0	0	0	0	1	0						

*24 hours post Rx (1) - vehicle

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in Cebus apella Monkey # 636

Monkey Number 636

Sex F

Experiment AID - Efficacy Control

Infection S. Japonicum (Philippines) 3/2

Route and Regimen Oral - vehicle only

Date	1-19	2-23	3-16	4-5	4-26*								
Day Rx	-91	-57	-35	-15	+7								
Hct %	48.7	43.2	41.0	37.6	37.0								
Hglb	14.9	13.4	12.6	11.9	10.9								
RBC X 10^6	5.98	5.43	5.21	4.61	4.70								
WBC X 10^3	6.5	4.5	5.2	5.9	16.7								
Differential: Neut., 1	2	0	0	0	.1								
Neut., M	30	25	37	29	62								
Lymph.	61	74	62	67	26								
Mon.	4	0	0	0	11								
Eo.	1	1	1	0	0								
Baso.	1	0	0	4	0								
Atyp. Lymph.	0	Rare	0	0	0								
Retic. (%)	0.4	2.2	0.3	0.1	0.5								
Prothrombin	ND	14.0/12.4	17.0/19.5	14.0/11.5	15.0/13.5								
Morphology													
1, 2, 3, 4													
Polychrom.	0	1	0	0	Rare								
Hypochrom	0	0	0	0	1								
Poik	1	0	1	0	0								
Target	0	0	0	0	0								
Sphero	0	0	0	0	0								
Aniso	1	1	0	0	0								
Micro	0	0	0	0	0								
Macro	0	0	0	0	0								
Baso. Stip	0	0	0	0	0								
Vacuoles	0	0	0	0	0								
Toxic Gran.	0	0	0	0	0								
Sickle Cells	0	0	0	0	0								
MCV u^3	82	80	79	80	79								
MCH uug	26.2	24.6	24.2	25.8	23.2								
MCHC %	30.5	31.0	30.7	32.4	29.4								

Comments: *6 days post Rx (1) -vehicle only.

Note: Day 1=Day of Treatment (Rx)

Rx_1 4/20

Rx_2 5/4

Table III Summary of Hematology

in *Cebus apella* Monkey # 489

Monkey Number 489

Sex F

Experiment AID-Efficacy

S. japonicum

Infection (Philippine) 3/2

Route and Regimen Oral Drug only

Date		1/19	2/23	3/16	4/5	4/21 *	4/26							
Day Rx		-91	-57	-35	-15	+2	+7							
Hct %		51.7	52.1	49.9	47.0	49.2	48.6							
Hglb		16.5	16.2	15.7	15.7	15.3	14.5							
RBC X 10^6		6.05	5.96	5.94	5.58	5.51	5.77							
WBC X 10^3		6.3	5.4	6.5	4.5	10.9	12.9							
Differential	Neut., 1	0	0	0	0	1	0							
	Neut., M	55	56	48	35	86	71							
	Lymph.	40	42	46	58	9	21							
	Mon.	2	1	5	3	4	7							
	Eo.	3	1	1	2	0	1							
	Baso.	0	0	0	2	0	0							
	Atyp. Lymph.	0	0	0	0	0	0							
Retic. %		0.6	N.D.	1.2	0.9	0.5	1.9							
Prothrombin		N.D.	QNS	17/21	14.0/17.0	13.5/15.5	15.0/14.0							
Morphology														
1, 2, 3, 4														
Polychrom.		0	0	0	0	0	1							
Hypochrom		0	0	0	0	0	0							
Poik		0	0	1	0	1	0							
Target		0	0	0	0	0	0							
Sphero		0	0	0	0	0	0							
Aniso		0	1	1	0	1	0							
Micro		0	0	0	0	0	0							
Macro		0	0	0	0	0	0							
Baso. Stip		0	0	0	0	0	0							
Vacuoles		0	0	0	0	0	0							
Toxic Gran.		0	0	0	0	0	0							
Sickle Cells		0	0	0	0	0	0							
MCV u^3		85	88	85	84	89	85							
MCH uug		27.3	27.1	26.4	28.1	27.7	25.1							
MCHC %		31.9	31.0	31.5	33.4	31.0	29.8							

Comments: * 24 hours post Rx(1)-10 mg/kg CGP-4540

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in Cebus apella Monkey # 445

Monkey Number 445

Sex M

Experiment AID - Efficacy

Infection S. Japonicum (Philippines) 3/2

Route and Regimen Oral - drug only

Date	1-19	2-23	3-16	4-5	4-21*	4-26							
Day Rx	-91	-57	-35	-15	+2	+7							
Hct %	43.2	42.8	41.0	36.6	37.8	31.7							
Hglb	13.8	13.2	12.4	12.0	12.0	9.8							
RBC X 10^6	5.43	5.33	5.11	4.60	4.71	4.14							
WBC X 10^3	6.4	6.2	7.5	5.6	18.7	24.5							
Diff Count Neut., 1	0	0	0	0	0	2							
Neut., M	44	47	56	66	74	80							
Lymph.	48	48	32	31	10	12							
Mon.	2	2	9	3	16	5							
Eo.	4	2	2	0	0	0							
Baso.	2	1	1	0	0	0							
Atyp. Lymph.	0	0	0	Rare	0	0							
Retic. (%)	0.4	ND	0.3	0.1	1.9	0.3							
Prothrombin	ND	ND	17.0/17.0	14.0/14.0	13.5/12.0	15.0/13.0							
Morphology													
3, 4													
Polychrom.	0	Rare	0	0	Rare	0							
Hypochrom	0	0	0	0	0	0							
Polk	0	0	1	0	0	0							
Target	0	0	0	0	0	0							
Sphero	0	0	0	0	0	0							
Aniso	2	1	1	1	1	1							
Micro	1	0	0	0	0	0							
Macro	0	0	0	0	0	0							
Baso. Stip	0	0	0	0	0	0							
Vacuoles	0	0	0	0	0	0							
Toxic Gran.	0	0	0	0	0	0							
Sickle Cells	0	0	0	0	0	0							
MCV u^3	80	81	81	80	80	77							
MCH uug	25.4	24.7	24.3	26.0	25.4	23.6							
MCHC %	31.9	30.8	30.2	32.7	31.7	30.9							

Comments: *24 hours post Rx(1) - 10 mg/kg CGP - 4540

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 905

Monkey Number 905

Sex M

Experiment AID - Efficacy

Infection *S. Haematobin* (Egypt) 1/30

Route and Regimen Oral

Date	1-17	1-27	2-13	3-6	4-24							
Day Rx												
Hct %	41.4	40.0	45.8	42.1	47.5							
Hglb	13.8	13.8	13.9	13.2	15.6							
RBC X 10^6	5.39	5.12	5.72	5.35	6.05							
WBC X 10^3	8.5	6.4	5.7	4.8	11.9							
Differential: Neut., 1	0	0	0	0	0							
Differential: Neut., M	30	43	16	35	23							
Differential: Lymph.	64	52	83	60	64							
Differential: Mon.	0	4	1	2	5							
Differential: Eo.	5	0	0	1	6							
Differential: Baso.	0	0	0	2	2							
Differential: Atyp. Lymph.	0	1	0	0	0							
Retic. (%)	0.7	2.4	1.0	0.5	0.8							
Prothrombin	ND	ND	ND	20/15	14/15							
Morphology												
1, 2, 3, 4												
Polychrom.	0	0	1	0	0							
Hypochrom	0	0	1	0	0							
Polk	0	0	0	0	0							
Target	0	0	0	0	0							
Sphero	0	0	0	0	0							
Aniso	1	1	1	1	0							
Micro	0	1	0	0	0							
Macro	0	0	0	0	0							
Baso. Stip	0	0	0	0	0							
Vacuoles	0	0	0	0	0							
Toxic Gran.	0	0	0	0	0							
Sickle Cells	0	0	0	0	0							
MCV u^3	77	78	80	79	79							
MCH uug	26.5	26.9	24.3	24.6	25.7							
MCHC %	33.3	34.5	30.3	31.3	32.8							

Comments:

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 552

Monkey Number 552

Sex F

Experiment AID - Efficacy

Infection S. Haematobin (Egypt) 1/30

Route and Regimen Oral

Date	1-17	1-27	2-13	3-6	4-24								
Day Rx													
Hct %	46.8	44.7	46.6	44.5	48.1								
Hglb	15.0	14.5	14.1	13.9	16.2								
RBC X 10^6	5.80	5.46	5.70	5.48	5.95								
WBC X 10^3	4.8	8.1	3.6	5.0	7.15								
Differential: Neut., 1	0	0	0	0	0								
Differential: Neut., M	33	67	29	41	31								
Differential: Lymph.	65	29	71	56	64								
Differential: Mon.	2	4	0	3	2								
Differential: Eo.	0	0	0	0	3								
Differential: Baso.	0	0	0	0	0								
Differential: Atyp. Lymph.	0	0	0	0	0								
Retic. (%)	0.4	2.2	1.6	0.5	1.3								
Prothrombin	ND	ND	ND	QNS	14.0/ 13.0								
Morphology 1, 2, 3, 4													
Polychrom.	0	1	0	0	1								
Hypochrom	0	0	0	0	0								
Poik	1	0	0	0	1								
Target	0	0	0	0	0								
Sphero	0	0	0	0	0								
Aniso	1	1	0	1	1								
Micro	0	0	0	0	1								
Macro	0	0	0	0	0								
Baso. Stip	0	0	0	0	0								
Vacuoles	0	0	0	0	0								
Toxic Gran.	0	0	0	0	0								
Sickle Cells	0	0	0	0	0								
MCV u^3	81	82	82	82	81								
MCH mug	25.8	26.5	24.7	25.3	27.2								
MCHC %	32.0	32.4	30.2	31.2	33.6								

Comments:

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 901

Monkey Number 901

Sex M

Experiment AID - Efficacy

Infection S. Haematobin (Egypt) 1/30

Route and Regimen Oral

Date	1-17	1-27	2-13	3-6	4-24								
Day Rx													
Hct %	40.5	40.0	43.4	40.2	47.9								
Hglb	12.0	13.7	13.2	12.7	15.7								
RBC X 10^6	5.10	5.12	5.40	5.10	6.00								
WBC X 10^3	13.5	9.3	6.6	9.3	13.6								
Differential: Neut., 1	1	1	1	0	1								
Differential: Neut., M	16	28	30	43	38								
Differential: Lymph.	78	63	61	56	56								
Differential: Mon.	4	6	8	1	5								
Differential: Eo.	1	0	0	0	0								
Differential: Baso.	0	0	0	0	0								
Differential: Atyp. Lymph.	0	2	0	0	Rare								
Retic. (%)	0.5	2.2	0.4	0.5	0.8								
Prothrombin	ND	ND	ND	20/18	14.0/ONS								
Morphology 1, 2, 3, 4													
Polychrom.	0	1	0	0	1								
Hypochrom	0	0	0	0	0								
Polk	0	1	0	0	1								
Target	0	0	0	0	0								
Sphero	0	0	0	0	0								
Aniso	0	2	1	1	1								
Micro	0	2	2	0	0								
Macro	0	0	0	0	0								
Baso. Stip	0	0	0	0	0								
Vacuoles	0	0	0	0	0								
Toxic Gran.	0	0	0	0	0								
Sickle Cells	0	0	0	0	0								
MCV u^3	0	78	80	79	80								
MCH uug	23.5	26.7	24.1	24.9	26.1								
MCHC %	29.6	34.2	30.4	31.5	32.7								

Comments:

Note: Day 1=Day of Treatment (Rx)

Table III Summary of Hematology

in *Cebus apella* Monkey # 551

Monkey Number 551

Sex F

Experiment AID - Efficacy

Infection S. Haematobin (Egypt) 1/30

Route and Regimen

Date	1-17	1-27	2-13	3-6	4-24							
Day Rx												
Hct %	39.4	32.0	41.5	40.0	41.4							
Hglb	13.0	10.8	12.8	12.6	13.2							
RBC X 10^6	5.00	3.97	5.12	4.98	5.17							
WBC X 10^3	6.1	8.3	4.7	7.9	8.8							
Differential: Neut., 1	0	0	1	0	2							
Neut., M	26	53	34	64	23							
Lymph.	65	42	60	33	63							
Mon.	1	1	2	1	1							
Eo.	6	4	0	0	9							
Baso.	2	0	2	2	2							
Atyp. Lymph.	0	0	0	0	0							
Retic.	0.8	2.6	0.3	0.5	1.7							
Prothrombin	ND	ND	ND	20/14	14/12							
Morphology 1, 2, 3, 4												
Polychrom.	0	2	0	0	2							
Hypochrom	0	0	0	0	1							
Polk	0	1	0	0	1							
Target	0	0	0	0	0							
Sphero	0	0	0	0	0							
Aniso	0	2	1	1	1							
Micro	0	0	0	0	0							
Macro	0	1	0	0	0							
Baso. Stip	0	0	0	0	0							
Vacuoles	0	0	0	0	0							
Toxic Gran.	0	0	0	0	0							
Sickle Cells	0	0	0	0	0							
MCV u^3	79	80	81	81	80							
MCH uug	26.0	27.2	25.0	25.3	25.5							
MCHC %	33.7	33.7	30.8	31.5	31.8							

Comments:

NRBC/100WBC 1 1

Note: Day 1=Day of Treatment (Rx)

Table IV Summary of Serology Results in

Cebus apella Monkey # 642

Monkey Number 642

Sex F

Experiment AID-Toxicity

Infection None

Route and Regimen oral-vehicle only

Date	1/7	1/27	2/15 *	2/21	2/28	3/7	3/15 **						
Day Rx	-29	-19	+2	+8	+15	+22	+2						
BUN	22	12	23	23	21	23	21						
Total Prot.	8.9	9.2	8.5	8.9	9.2	8.9	8.4						
Albumin	4.4	4.7	4.3	4.6	5.1	4.5	4.0						
Calcium	11.8	11.3	10.4	10.6	11.9	10.5	10.0						
Phosphorus	5.3	5.2	4.9	5.2	4.3	4.2	8.9						
Cholesterol	172	176	175	151	154	201	195						
Glucose	84	124	136	113	113	100	83						
Uric Acid	2.9	2.4	2.3	3.1	2.8	2.7	3.7						
Creatinine	0.9	0.9	1.3	0.9	1.2	1.0	1.2						
Bili. Total	<.3	0.4	0.2	0.3	0.3	0.5	0.6						
Alk. Phos'tase	21	24	25	26	33	35	34						
LDH	93	79	157	85	88	59	150						
SGOT	20	13	51	29	11	29	79						
SGPT	17	21	28	11	9	39	34						
Sodium	159	155	157	152	156	156	148						
Potassium	6.2	6.0	5.7	5.8	6.0	5.3	5.1						
Chloride	-	119	122	109	112	109	105						
GGTP	-	40	203	56	51	225	-						
Iron	-	78	97	54	116	58	-						

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post 1st Rx - vehicle only

** 24 hours post 2nd Rx - vehicle only

Table IV Summary of Serology Results in

Cebus apella Monkey # 557

Monkey Number 557

Sex M

Experiment AID-Toxicity

Infection None

Route and Regimen oral - vehicle only

Date	1/17	1/29	2/19 *	2/21	2/28	3/7	3/15 **	3/22	3/29	4/5	4/12		
Day Rx	-29	-19	+1	+7	+74	+24	+1	+8	+15	+22	+29		
BUN	30	20	34	36	29	39	32	38	33	36	30		
Total Prot.	-	9.0	8.1	8.8	9.5	9.1	8.4	8.7	8.9	9.4	8.5		
Albumin	-	5.3	4.7	5.1	6.1	5.4	4.8	5.1	5.2	5.5	5.1		
Calcium	13.4	12.2	10.4	11.6	12.6	-1.4	10.1	11.1	10.9	11.2	10.6		
Phosphorus	-	6.6	5.4	5.4	5.3	7.1	8.1	5.1	5.0	6.1	3.7		
Cholesterol	159	180	144	94	169	226	163	230	179	224	184		
Glucose	-	113	136	108	84	88	105	114	108	122	79		
Uric Acid	-	3.3	2.4	3.1	3.8	2.6	2.8	2.3	3.0	3.6	2.7		
Creatinine	1.2	1.9	1.7	1.0	1.8	0.7	3.3	1.6	1.0	1.6	1.3		
Bili. Total	<.3	0.1	0.3	0.3	0.3	0.1	0.6	0.4	0.1	<0.1	0.2		
Alk. Phos'tase	-	155	154	172	160	164	87	56	42	51	34		
LDH	-	101	589	119	113	87	144	82	67	111	77		
SGOT	-	55	412	51	23	-	57	20	39	14	9		
SGPT	-	63	173	31	21	17	20	20	6	16	11		
Sodium	162	165	162	156	160	166	152	161	157	158	151		
Potassium	6.8	6.3	5.1	5.6	7.0	6.6	5.2	5.2	4.6	5.7	5.4		
Chloride	-	112	116	116	112	116	107	112	106	109	109		
GGTP	-	45	157	56	64	64	48	55	28	-	42		
Iron	-	136	154	205	245	126	106	164	-	186	168		

Comments:

Note: Day 1 = Day of Treatment (Rx)
* 24 hours post 1st Rx - vehicle only
** 24 hours post 2nd Rx - vehicle only

Table IV Summary of Serology Results in

Cebus apella Monkey # 801

Monkey Number 801

Sex M

Experiment AID-Toxicity

Infection None

Route and Regimen Oral drug & Erythromycin

Date	1-17	1-27	2-15 *	2-21	2-28	3-7	3-15 **	3-22	3-29	4-5	4-12		
Day Rx	-29	-19	+2	+8	+5	+22	+2	+9	+16	+23	+30		
BUN	25	14	26	21	23	32	28	16	23	31	20		
Total Prot.	-	8.2	8.5	8.2	8.3	8.9	8.1	5.0	8.6	9.2	8.3		
Albumin	-	4.8	5.0	4.7	5.2	5.2	4.6	2.9	5.0	5.4	4.8		
Calcium	11.0	13.9	10.5	10.2	10.5	10.2	9.4	6.0	10.6	9.8	10.4		
Phosphorus	-	3.6	3.4	4.9	3.5	2.9	5.1	2.6	3.2	3.5	4.3		
Cholesterol	169	136	144	161	154	164	159	99	119	164	138		
Glucose	105	128	104	106	157	161	110	96	107	113	117		
Uric Acid	-	2.7	2.2	2.6	3.3	3.6	3.5	2.3	3.4	4.5	2.9		
Creatinine	0.9	1.0	1.2	0.5	1.5	1.0	1.0	0.9	1.0	1.2	1.0		
Bili. Total	<.3	0.3	0.1	0.1	0.3	0.4	0.5	0.3	<.1	0.1	0.1		
Alk. Phos'tase	56	67	64	72	67	61	53	40	52	61	48		
LDH	82	70	79	81	83	53	110	33	35	78	65		
SGOT	29	45	44	41	28	54	67	23	22	25	5		
SGPT	38	16	25	16	21	15	26	10	13	18	13		
Sodium	-	151	164	154	139	152	149	152	153	151	152		
Potassium	-	3.8	4.2	5.0	3.7	3.9	4.2	4.0	4.1	4.3	5.6		
Chloride	-	102	112	109	109	109	117	109	109	106	109		
GGTP	-	-	50	20	23	-	32	30	57	41	42		
Iron	-	86	81	160	135	38	34	25	-	71	64		

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post 1st Rx - drug only

** 24 hours post 2nd Rx - drug & Erythromycin

Table IV Summary of Serology Results in

Cebus apella Monkey # 674

Monkey Number 674

Sex F

Experiment AID-Toxicity

Infection None

Route and Regimen oral-drug & Erythromycin

			*				**						
Date	1/17	1/17	2/15	2/21	2/28	3/7	3/15	3/22	3/29	4/5	4/12		
Day Rx	-29	-19	+2	+8	+15	+22	+2	+9	+16	+23	+30		
BUN	33	17	29	28	30	41	38	32	27	36			
Total Prot.	-	8.0	7.9	8.8	8.2	8.7	6.7	7.3	7.9	8.0			
Albumin	-	4.5	4.4	4.9	4.8	5.1	3.8	4.3	4.6	4.7			
Calcium	11.3	10.0	10.2	11.6	11.1	11.3	9.4	10.6	10.9	10.1			
Phosphorus	-	4.4	4.6	4.9	5.1	6.6	5.4	6.8	4.5	3.7			
Cholesterol	182	222	187	217	231	231	177	235	203	195			
Glucose	105	154	109	114	80	82	77	146	120	107			
Uric Acid	-	3.1	2.5	2.7	4.0	3.5	4.1	3.8	3.8	4.3			
Creatinine	0.9	1.3	1.1	0.9	1.1	1.3	0.9	1.3	0.8	1.0			
Bili. Total	<.3	0.4	0.3	0.3	0.2	0.4	0.5	0.4	<.1	<.1			
Alk. Phos'tase	-	39	44	47	49	46	30	33	25	32			
LDH	106	79	91	85	67	63	139	56	91	85			
SGOT	13	39	63	40	21	46	90	37	39	28			
SGPT	54	21	47	23	26	27	43	12	15	22			
Sodium	-	151	166	153	147	161	149	145	151	151			
Potassium	-	4.2	5.0	5.0	4.8	4.8	4.7	4.6	3.9	5.1			
Chloride	-	112	125	112	116	109	106	116	106	109			
GGTP	-	28	81	25	27	-	33	36	-	50			
Iron	-	61	92	246	128	-	-	153	-	98			

Comments:

Note: Day 1 = Day of Treatment (Rx)
* 24 hours post 1st Rx - Drug only
** 24 hours post 2nd Rx - Drug & Erythromycin

Table IV Summary of Serology Results in

Cebus apella Monkey # 692

Monkey Number 692 Infection None

Sex F Route and Regimen oral-drug & Erythromycin

Experiment AID-Toxicity

Date	1/17	1/27	2/15 *	2/21	2/28	3/7	3/15 **	3/22	3/29	4/5	4/12		
Day Rx	-29	-19	+2	+8	+15	+22	+2	+9	+16	+23	+30		
BUN	31	17	22	22	26	26	32	29	26	32	27		
Total Prot.	7.9	8.4	8.0	8.4	8.5	7.8	7.7	7.9	8.3	8.2	7.8		
Albumin	4.7	4.8	4.9	5.1	5.7	4.8	4.8	4.9	5.1	5.0	4.7		
Calcium	11.0	11.1	10.4	11.6	12.5	9.9	10.3	10.7	10.9	9.8	10.6		
Phosphorus	5.2	4.9	5.9	6.0	3.9	4.0	5.0	5.1	5.2	4.4	3.5		
Cholesterol	129	168	133	154	138	155	181	200	171	144	136		
Glucose	127	119	110	112	132	176	85	127	130	93	111		
Uric Acid	3.6	4.9	2.0	2.8	4.2	3.5	4.5	4.3	3.9	4.2	3.9		
Creatinine	0.8	1.1	0.8	0.9	1.1	1.1	1.1	0.5	0.7	1.0	0.9		
Bili. Total	<.3	0.4	0.2	0.2	0.1	0.6	0.5	0.4	0.1	0.1	0.2		
Alk. Phos'tase	59	47	36	55	61	40	40	35	30	-	27		
LDH	109	93	407	106	90	64	104	44	51	102	99		
SGOT	34	23	144	45	44	44	62	14	31	25	12		
SGPT	26	24	39	28	-	14	26	18	31	33	22		
Sodium	-	167	158	156	147	149	149	156	152	152	149		
Potassium	-	5.4	5.6	6.5	5.6	4.9	4.8	4.7	4.5	4.8	5.1		
Chloride	-	116	125	112	116	102	107	122	109	109	109		
GGTP	-	15	35	-	27	13	21	32	49	18	40		
Iron	-	114	114	78	108	51	41	99	-	121	99		

Comments:

HEMOLYZED

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post 1st Rx - Drug & Erythromycin

** 24 hours post 2nd Rx - Drug alone

Table IV Summary of Serology Results in

Cebus apella Monkey # 476

Monkey Number 476

Sex M

Experiment AID- Toxicity

Infection None

Route and Regimen oral-CPG-4540 & Erythromycin

Date	1/17	1/27	2/15 *	2/21	2/28	3/7	3/15 **	3/22	3/29	4/5	4/12		
Day Rx	-29	-19	+2	+8	+15	+22	+2	+9	+18	+23	+30		
BUN	43	27	28	39	23	27	28	32	25	33	27		
Total Prot.	-	9.7	8.2	9.0	8.8	8.6	8.0	8.3	8.5	9.0	8.0		
Albumin	-	5.9	4.7	5.2	5.5	5.2	4.7	5.0	5.0	5.2	4.7		
Calcium	10.9	11.6	10.2	11.0	10.3	10.8	9.5	10.1	10.6	9.4	10.3		
Phosphorus	-	5.2	2.8	4.2	2.9	2.8	7.4	4.7	4.9	4.0	3.4		
Cholesterol	189	243	211	243	220	247	238	210	178	206	156		
Glucose	156	69	139	88	110	77	129	131	153	127	72		
Uric Acid	-	3.2	2.6	2.9	2.4	2.7	3.2	2.7	3.5	3.7	3.1		
Creatinine	1.4	1.4	0.9	0.6	1.4	1.0	1.4	1.0	1.3	1.1	1.1		
Bili. Total	<.3	0.4	0.1	0.4	0.2	0.5	0.4	0.4	-	<.1	0.2		
Alk. Phos'tase	-	45	33	39	42	30	28	33	27	35	26		
LDH	85	66	257	'04	106	70	166	69	109	66	68		
SGOT	-	29	-	29	31	29	64	40	45	22	-		
SGPT	12	16	30	8	14	9	16	18	10	9	13		
Sodium	155	160	150	152	145	153	149	150	154	149	144		
Potassium	5.5	4.9	4.4	4.5	3.5	4.3	4.2	3.5	4.1	4.3	4.2		
Chloride	-	109	112	109	106	109	107	106	109	102	102		
GGTP	22	23	50	25	-	10	19	47	46	31	40		
Iron	-	155	145	159	-	80	57	147	-	110	107		

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post 1st Rx - Drug & Erythromycin

** 24 hours post 2nd Rx - Drug alone

Table IV Summary of Serology Results in

Cebus apella Monkey # 577

Monkey Number 577

Sex F

Experiment AID - Efficacy, Control

Infection 1/30 *S. mansoni* (WRAIR)

Route and Regimen Oral - Vehicle only

Date	1/18	1/30	2/13	3/6	4/11*	4/18	4/20						
Day Rx	-82	-70	-56	-35	+2	+9	Died						
BUN	34	-	22	18	22	22							
Total Prot.	-	7.8	8.3	8.5	8.0	8.2							
Albumin	-	4.4	4.8	5.2	4.4	4.5							
Calcium	10.9	10.6	11.6	10.9	9.9	10.1							
Phosphorus	-	6.5	4.5	5.2	5.2	3.8							
Cholesterol	156	139	171	102	133	156							
Glucose	-	146	141	79	108	114							
Uric Acid	-	-	3.1	1.5	2.1	3.3							
Creatinine	0.7	0.7	1.0	0.3	0.9	1.2							
Bili. Total	<0.3	0.5	0.2	0.4	0.1	0.1							
Alk. Phos'tase	-	136	101	120	42	36							
LDH	-	71	78	103	83	60							
SGOT	-	35	34	29	30	29							
SGPT	-	32	23	19	11	-							
Sodium	-	147	148	149	142	143							
Potassium	-	4.7	4.5	4.9	4.4	4.9							
Chloride	-	106	109	112	106	109							
GGTP	-	-	-	44	59	38							
Iron	-	-	-	93	178	-							

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post R_x (1) - Vehicle only

Table IV Summary of Serology Results in

Cebus apella Monkey # 907

Monkey Number 907

Sex M

Experiment AID - Efficacy, Control

Infection 1/30 S. mansoni (WRAIR)

Route and Regimen Oral - Vehicle only

Date	1/18	1/30	2/13	3/6	4/11 *	4/18							
Day Rx	-82	-70	-56	-35	+2	+9							
BUN	23	12	20	15	8	25							
Total Prot.	-	8.3	8.6	7.9	8.3	8.6							
Albumin	-	5.1	5.2	4.9	4.2	4.3							
Calcium	12.5	12.4	11.9	11.4	11.0	11.4							
Phosphorus	-	7.7	5.4	5.5	7.5	7.1							
Cholesterol	134	150	178	92	101	191							
Glucose	86	102	125	111	133	100							
Uric Acid	-	2.2	3.6	1.9	3.9	4.4							
Creatinine	0.9	1.5	1.5	0.6	1.2	1.1							
Bili. Total	<0.3	0.5	0.2	0.4	0.2	0.1							
Alk. Phos'tase	-	289	159	214	76	49							
LDH	-	88	91	77	126	144							
SGOT	-	35	71	31	68	34							
SGPT	20	26	33	19	28	11							
Sodium	-	158	159	159	142	152							
Potassium	-	6.3	5.0	5.8	7.1	6.8							
Chloride	-	122	119	119	106	109							
GGTP	-	-	-	73	22	42							
Iron	-	189	-	100	67	-							

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post R_x(1) - Vehicle only

Table IV Summary of Serology Results in

Cebus apella Monkey # 576

Monkey Number 576

Sex M

Experiment AID-Efficacy

Infection 1/30 *S. mansoni* (WRAIR)

Route and Regimen Oral - Drug & Erythromycin

Date	1/18	1/30	2/13	3/6	4/11 *	4/16							
Day Rx	-82	-70	-56	-35	+2	Died							
BUN	25	13	28	18	21								
Total Prot.	8.2	7.8	8.9	8.2	6.5								
Albumin	4.9	4.5	5.4	5.1	3.2								
Calcium	11.7	11.0	12.1	11.1	9.3								
Phosphorus	8.2	5.4	5.5	5.5	6.4								
Cholesterol	151	-	187	113	81								
Glucose	71	77	88	68	128								
Uric Acid	4.4	1.9	3.8	2.0	3.0								
Creatinine	0.9	0.2	1.0	0.4	0.9								
Bili. Total	<0.3	0.4	0.2	0.5	0.2								
Alk. Phos'tase	187	118	115	149	26								
LDH	117	79	89	123	142								
SGOT	33	32	36	41	37								
SGPT	52	30	26	32	9								
Sodium	157	156	159	156	146								
Potassium	5.8	5.6	5.0	6.0	5.3								
Chloride	-	106	106	109	102								
GGTP	93	28	172	57	67								
Iron	-	197	140	172	-								

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post R_x(1) - 10 mg/kg CGP-4540 & 50 mg/kg Erythromycin

Rx 1 4/10
Rx 2 5/4

Table IV Summary of Serology Results in *Cebus apella* Monkey # 155

Monkey Number 155

Sex F

Experiment AID - Efficacy

Infection 1/30 *S. mansoni* (WRAIR)

Route and Regimen Oral - Drug & Erythromycin

Date	1/18	1/30	2/13	3/6	4/11*	4/18							
Day Rx	-82	-70	-56	-35	+2	+9							
BUN	26	15	-	21	31	26							
Total Prot.	8.2	9.0	-	9.5	9.1	8.9							
Albumin	4.9	5.5	-	5.8	4.5	4.6							
Calcium	11.3	12.2	-	12.8	11.3	12.2							
Phosphorus	6.1	6.1	-	5.3	6.8	5.9							
Cholesterol	120	171	-	125	140	185							
Glucose	143	150	-	122	121	118							
Uric Acid	3.4	2.6	-	1.9	2.7	3.8							
Creatinine	0.8	1.2	-	0.9	1.0	1.4							
Bili. Total	<0.3	0.6	-	0.4	0.3	0.1							
Alk. Phos'tase	32	31	-	32	24	22							
LDH	53	72	-	59	356	62							
SGOT	26	36	-	-	211	42							
SGPT	19	24	14	17	63	21							
Sodium	157	159	164	167	153	151							
Potassium	5.6	6.3	5.9	6.9	6.3	6.2							
Chloride	-	116	119	119	106	125							
GGTP	21	19	49	-	37	32							
Iron	-	104	-	-	109	-							

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post R_x(1) - 10 mg/kg CGP-4540 & 50 mg/kg Erythromycin

Table IV Summary of Serology Results in

Cebus apella Monkey # 565

Monkey Number 565

Sex F

Experiment AID - Efficacy

Infection 1/30 *S. mansoni* (WRAIR)

Route and Regimen Oral - Drug alone

Date	1/18	1/30	2/13	3/6	4/11*	4/18							
Day Rx	-82	-70	-56	-35	+2	+9							
BUN	20	10	9	12	23	22							
Total Prot.	8.8	8.3	-	8.6	9.3	9.6							
Albumin	5.3	-	-	5.2	4.0	4.4							
Calcium	11.8	10.5	10.6	10.7	9.5	10.9							
Phosphorus	6.2	5.0	-	3.8	4.7	4.4							
Cholesterol	191	187	200	189	146	201							
Glucose	74	139	112	84	105	83							
Uric Acid	2.4	2.1	-	1.5	2.9	4.5							
Creatinine	0.9	1.3	1.0	0.4	1.0	1.4							
Bili. Total	<0.3	0.5	0.3	0.6	0.1	0.2							
Alk. Phos'tase	43	48	42	46	27	38							
LDH	65	65	61	66	83	111							
SGOT	27	26	41	36	26	49							
SGPT	26	27	-	30	26	42							
Sodium	158	153	151	156	145	151							
Potassium	4.7	4.0	4.1	4.0	4.5	5.1							
Chloride	-	109	106	106	102	112							
GGTP	64	32	-	35	82	68							
Iron	-	140	-	161	107	-							

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post $R_x(1)$ - CGP-4540 only

Table IV Summary of Serology Results in

Cebus apella Monkey # 581

Monkey Number 581

Sex M

Experiment AID-Efficacy

Infection 1/30 *S. mansoni* (WRAIR)

Route and Regimen Oral-Drug alone

Date	1/18	1/30	2/13	3/6	4/11*	4/18							
Day Rx	-82	-70	-56	-35	+2	+9							
BUN	27	19	25	22	8	32							
Total Prot.	-	7.7	8.0	9.0	9.1	9.2							
Albumin	-	4.9	4.8	5.6	4.4	4.7							
Calcium	12.2	12.0	11.6	11.9	11.3	12.2							
Phosphorus	-	7.1	6.2	6.7	9.1	9.5							
Cholesterol	129	134	163	159	140	177							
Glucose	73	104	86	74	135	121							
Uric Acid	-	3.5	2.4	2.5	-	5.3							
Creatinine	0.7	1.1	0.9	0.8	1.1	1.4							
Bili. Total	<0.3	0.3	0.2	0.4	0.3	<0.1							
Alk. Phos'tase	-	181	145	157	66	67							
LDH	56	140	128	123	303	186							
SGOT	-	26	46	39	141	40							
SGPT	40	33	36	22	47	26							
Sodium	159	158	169	163	149	149							
Potassium	6.0	8.0	7.4	7.0	7.2	6.7							
Chloride	-	112	119	112	106	112							
GGTP	36	11	142	-	-	40							
Iron	-	89	151	-	80	-							

Comments:

Note: Day 1 = Day of Treatment (Rx)
* 24 hours post R_x - CGP-4540 only

Rx 1 4/20
Rx 2 5/4

Table IV Summary of Serology Results in

Cebus apella Monkey # 475

Monkey Number 475

Sex M

Experiment AID - Efficacy, control

Infection 3/2 *S. japonicum* (Philippine)

Route and Regimen oral - vehicle only

Date	1/19	2/23	3/16	4/5	4/21 *								
Day Rx	-91	-57	-35	-15	+2								
BUN	19	21	15	25	18								
Total Prot.	-	9.1	8.2	9.2	8.5								
Albumin	-	5.0	4.6	5.0	4.4								
Calcium	11.3	11.2	10.9	10.3	9.8								
Phosphorus	-	5.8	6.1	4.9	8.2								
Cholesterol	188	155	128	146	153								
Glucose	-	94	86	99	80								
Uric Acid	-	3.1	1.7	3.7	3.7								
Creatinine	1.1	0.9	0.7	1.2	1.7								
Bili. Total	<0.3	0.3	0.6	0.2	0.2								
Alk. Phos'tase	-	84	62	98	80								
LDH	-	136	101	83	180								
SGOT	-	34	52	20	49								
SGPT	6	18	93	26	19								
Sodium	159	156	156	154	152								
Potassium	5.2	5.7	5.7	6.1	5.3								
Chloride	-	116	113	106	112								
GGTP	-	29	51	70	34								
Iron	-	149	144	119	-								

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post Rx (1) - vehicle

Table IV Summary of Serology Results in

Cebus apella Monkey # 636

Monkey Number 636

Sex F

Experiment AID-Efficacy, Control

Infection 3/2 *S. japonicum* (Philippine)

Route and Regimen oral - vehicle only

Date	1/19	2/23	3/16	4/21*									
Day Rx	-91	-57	-35	+2									
BUN	24	26	25	31									
Total Prot.	9.7	8.9	7.6	7.6									
Albumin	5.6	5.2	4.4	3.9									
Calcium	12.7	11.1	10.6	9.3									
Phosphorus	6.7	5.7	6.5	6.8									
Cholesterol	268	224	230	151									
Glucose	93	126	115	138									
Uric Acid	3.3	2.8	1.1	3.9									
Creatinine	1.0	0.7	0.7	1.6									
Bili. Total	<.3	0.2	0.6	0.1									
Alk. Phos'tase	25	25	15	18									
LDH	84	68	49	240									
SGOT	28	37	10	100									
SGPT	17	18	9	32									
Sodium	168	157	155	153									
Potassium	6.5	5.4	5.3	4.8									
Chloride	-	116	114	109									
GGTP	-	34	172	72									
Iron	-	92	136	-									

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post Rx (1) - vehicle

Rx 1 4/20
Rx 2 5/4

Table IV Summary of Serology Results in

Cebus apella Monkey # 489

Monkey Number 489

Sex F

Experiment AID - Efficacy

Infection 3/2 *S. japonicum* (Philippine)

Route and Regimen oral - drug alone

Date	1/19	2/23	3/16	4/5	4/21*								
Day Rx	-91	-57	-35	-15	+2								
BUN	27	26	23	33	24								
Total Prot.	8.8	8.1	7.8	8.0	7.4								
Albumin	4.6	4.3	4.1	4.3	3.9								
Calcium	11.9	10.2	10.3	9.3	9.4								
Phosphorus	5.0	4.0	5.4	3.0	3.5								
Cholesterol	200	171	141	169	150								
Glucose	64	99	88	101	71								
Uric Acid	3.3	2.9	1.4	3.7	2.9								
Creatinine	1.2	1.0	1.1	1.1	1.5								
Bili. Total	<0.3	0.2	0.6	0.1	0.2								
Alk. Phos'tase	30	37	28	31	23								
LDH	135	73	64	69	137								
SGOT	32	24	29	25	54								
SGPT	20	16	25	-	22								
Sodium	159	154	153	143	154								
Potassium	6.0	4.7	5.6	4.9	4.8								
Chloride	-	109	106	102	116								
GGTP	22	25	32	8	34								
Iron	-	124	379	174	-								

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hours post Rx (1) - C6P-4540 only

Rx 1 4/20
Rx 2 5/4

Table IV Summary of Serology Results in

Cebus apella Monkey # 445

Monkey Number 445

Sex M

Experiment AID- Efficacy

Infection 3/2 *S. japonicum* (Philippine)

Route and Regimen oral - drug alone

Date	1/19	2/23	3/16	4/5	4/21*								
Day Rx	-91	-57	-35	-15	+2								
BUN	30	21	24	41	20								
Total Prot.	7.8	9.1	7.6	7.9	7.4								
Albumin	4.5	5.0	4.6	4.7	4.0								
Calcium	10.8	11.2	10.4	9.3	10.0								
Phosphorus	5.5	5.8	6.2	3.6	5.1								
Cholesterol	142	155	154	140	147								
Glucose	120	94	101	122	132								
Uric Acid	3.3	3.1	1.1	4.3	2.5								
Creatinine	0.9	0.9	1.0	1.2	1.3								
Bili. Total	<0.3	0.3	0.4	0.1	0.1								
Alk. Phos'tase	21	84	13	23	14								
LDH	176	136	52	88	216								
SGOT	34	34	19	28	77								
SGPT	15	18	11	6	19								
Sodium	-	161	150	144	153								
Potassium	-	5.2	5.3	4.3	4.5								
Chloride	-	116	119	109	116								
GGTP	22	16	29	-	32								
Iron	-	149	-	116	-								

Comments:

Note: Day 1 = Day of Treatment (Rx)

* 24 hour post Rx (1) - CGP-4540 only

Table IV Summary of Serology Results in

Cebus apella Monkey # 905

Monkey Number 905

Sex M

Experiment AID-Efficacy

Infection 1/30 *S. haematobium* (Egypt)

Route and Regimen

Date	1/17	1/27	2/13	3/6									
Day Rx	-109	-99	-82	-61									
BUN	36	21	28	12									
Total Prot.	7.7	7.4	8.6	7.5									
Albumin	4.6	4.8	5.2	4.9									
Calcium	11.7	10.4	12.6	10.9									
Phosphorus	8.0	7.1	6.2	4.5									
Cholesterol	174	147	139	111									
Glucose	160	196	126	101									
Uric Acid	4.3	4.7	4.9	2.2									
Creatinine	-	0.9	1.1	0.6									
Bili. Total	<0.3	0.4	0.3	0.5									
Alk. Phos'tase	359	368	315	246									
LDH	103	85	88	99									
SGOT	23	42	37	36									
SGPT	17	26	33	17									
Sodium	153	150	170	159									
Potassium	6.2	5.1	6.5	5.8									
Chloride	-	116	116	116									
GGTP	-	-	149	-									
Iron	-	-	174	138									

Comments:

Note: Day 1 = Day of Treatment (Rx)

Table IV Summary of Serology Results in

Cebus apella Monkey # 552

Monkey Number 552

Sex F

Experiment AID-Efficacy

Infection 1/30 *S. haematobium* (Egypt)

Route and Regimen Oral

Date	1/17	1/27	2/13	3/6									
Day Rx	-109	-99	-82	-61									
BUN	28	20	24	23									
Total Prot.	-	9.1	8.8	7.9									
Albumin	-	5.0	4.9	4.5									
Calcium	10.8	10.6	11.3	11.1									
Phosphorus	-	4.6	4.9	3.9									
Cholesterol	166	214	166	89									
Glucose	101	114	104	91									
Uric Acid	-	3.3	3.5	1.8									
Creatinine	0.9	1.2	1.1	0.9									
Bili. Total	<0.3	0.6	0.3	0.4									
Alk. Phos'tase	-	47	45	33									
LDH	141	95	52	96									
SGOT	-	26	34	26									
SGPT	-	16	-	15									
Sodium	-	-	162	154									
Potassium	-	-	5.4	5.4									
Chloride	-	-	122	122									
GGTP	-	-	-	-									
Iron	-	114	-	-									

Comments:

Note: Day 1 = Day of Treatment (Rx)

Table IV Summary of Serology Results in

Cebus apella Monkey # 901

Monkey Number 901

Sex M

Experiment AID- Efficacy

Infection *S. haematobium* (Egypt) 1/30

Route and Regimen Oral

Date	1/17	1/27	2/13	3/6									
Day Rx	-109	-99	-82	-61									
BUN	41	25	26	34									
Total Prot.	7.8	8.2	9.0	8.5									
Albumin	4.2	4.6	5.2	4.9									
Calcium	11.3	10.7	11.9	11.0									
Phosphorus	9.9	7.3	5.4	4.1									
Cholesterol	171	162	201	145									
Glucose	186	165	112	89									
Uric Acid	5.6	4.6	3.2	2.2									
Creatinine	0.8	1.4	0.9	1.0									
Bili. Total	<0.3	0.4	0.3	0.4									
Alk. Phos'tase	255	227	96	122									
LDH	106	98	88	103									
SGOT	28	26	37	39									
SGPT	24	18	17	22									
Sodium	152	152	152	156									
Potassium	4.9	5.5	5.8	5.2									
Chloride	-	116	109	112									
GGTP	-	-	211	-									
Iron	-	150	229	-									

Comments:

Note: Day 1 = Day of Treatment (Rx)

Table IV Summary of Serology Results in

Cebus apella Monkey # 551

Monkey Number 551

Sex F

Experiment AID-Efficacy

Infection 1/30 *S. haematobium* (Egypt)

Route and Regimen Oral

Date	1/17	1/27	2/13	3/6									
Day Rx	-109	-99	-82	-61									
BUN	31	17	21	22									
Total Prot.	7.9	7.9	9.0	8.4									
Albumin	4.3	4.6	5.1	4.8									
Calcium	9.9	9.8	10.9	9.9									
Phosphorus	5.4	4.9	4.5	4.0									
Cholesterol	158	188	210	156									
Glucose	178	132	121	96									
Uric Acid	4.7	3.4	3.4	3.5									
Creatinine	0.9	1.2	0.9	0.4									
Bili. Total	<0.3	0.5	0.3	0.4									
Alk. Phos'tase	59	56	51	43									
LDH	85	79	78	77									
SGOT	30	32	51	16									
SGPT	40	16	31	10									
Sodium	148	153	156	152									
Potassium	4.4	4.6	4.0	4.2									
Chloride	-	109	102	119									
GGTP	36	19	80	15									
Iron	-	140	131	143									

Comments:

Note: Day 1 = Day of Treatment (Rx)

Table V Summary of Urinalysis Results in *Cebus apella* Monkey # 642

Monkey Number 642

Sex F

Experiment AID-Toxicity

Infection None

Route and Regimen Oral Control Vehicle SID X 1

			**				***						
Date	1/17	1/27	2/16	2/21	2/28	3/7	3/16						
Day Rx	-29	-19	+3	+8	+15	+22	+3						
Blood	+3	+3	+1	+1	trace	+2	1						
Glucose	0	0	0	0	0	0	0						
Protein	trace	trace	0	0	+1	+2	0						
Ketone	0	0	0	0	0	0	+1						
Bilirubin	0	0	0	0	0	0	0						
Urobilinogen	0	0	0	0	0	0	0						
Porphobilinogen	0	0	0	0	0	0	0						
pH	6	7	6	8	6	7	6						
Color	*	*	*	*	*	*	*						
Hemoglobin	0	0	0	0	0	0	0						
Myoglobin	0	0	0	0	0	0	0						
Other	0	0	0	0	0	0	0						
Specific Gravity	1.037	1.012	1.005	1.013	1.024	1.024	1.005						
Epith cells	0	0	rare	*	0	0	*						
WBC	0	0	0	0	0-1	0	0						
RBC	*	*	rare	0	0-2	0	0						
Casts	0	0	0	0	0	0	0						
Crystals	*	0	0	*	*	*	0						
Bacteria	-	many	many	+4	+4	+4	+4						
Other	-	0	0	0	0	0	0						
Comments:	-	*	*	0	*	*	*						

*Color-1/17,1/27,2/21,2/28,3/7-yellow, 2/16,3/16-light yellow
Epith cells-2/21,3/16-rare squamous RBC-1/17-50-75, 1/27-10-14
Crystals-1/17-amorph material, 2/21-med. triphos,2/28-1+ triphos, 3/7-2+ triphos Comments-1/17-question of trichomonas, 1/27-9 13 protozoans HPF, 3/7- 4+ protozoans, 3/16 1+ protozoans

Note: Day 1 = Day of Treatment (Rx)
** 48 hours post Rx_1 - Vehicle
***48 hours post Rx_2- Vehicle

Table V Summary of Urinalysis Results in *Cebus apella* Monkey # 557

Monkey Number 557

Sex M

Experiment AID-Toxicity

Infection None

Route and Regimen Oral Vehicle SID X 1

Date	1/17	2/16 **	2/23	2/28	3/7	3/16 ***	3/27	3/29	4/6	4/13	4/19		
Day Rx	-29	+3	+10	+15	+22	+3	+14	+16	+24	+31	+37		
Blood	+3	+2	trace	0	0	+1	+4	trace	0	0	0		
Glucose	0	0	0	0	0	0	0	0	0	0	0		
Protein	+1	+2	+1	+1	+3	0	0	0	0	trace	0		
Ketone	0	0	0	0	+1	0	0	0	0	0	0		
Bilirubin	0	0	0	0	0	0	0	0	0	0	0		
Urobilinogen	0	0	0	0	0	0	0	0	0	0	0		
Porphobilinogen	0	0	0	0	0	0	0	0	0	0	0		
pH	7	8	7.5	7	6	6.5	7.5	6.5	7	7	6		
Color	*	*	*	*	*	*	*		*	*	*		
Hemoglobin	0	0	0	0	0	0	0	0	0	0	0		
Myoglobin	0	0	0	0	0	0	0	0	0	0	0		
Other	0	0	0	0	0	0	0	0	0	0	0		
Specific Gravity	1.021	1.013	1.033	1.025	1.081	1.012	1.008	1.015	1.030	1.013	1.003		
Epith cells	*	0	0	0	0	0	0	0	0	*	0		
WBC	2-4	0	0-1	0	0	0	rare	0	0	0	0		
RBC	1-2	0	0-1	0	0	0	0	0	0	0	0		
Casts	0	0	0	0	0	0	0	0	0	0	0		
Crystals	*	*	*	*	*	*	0	*	*	0	0		
Bacteria	mod	many	+3	*	0	+2	+2	+4	+4	+4	few		
Other	0	0	0	0	0	0	0	0	0	0	0		
Comments:	0	0	0	0	0	0	*	*	0	0	0		

*Color-1/17, 2/16, 2/23, 2/28, 3/7, 3/16, 3/27, 4/6-yellow; 4/13, 4/19-light yellow

Epith cells-1/17-rare squamous; 4/13-few squamous

Crystals-1/17-mod tri phosph, occ. amorph; 2/16-3+ tri phos; 2/23-many tri phos; 2/28, 3/7-2+ tri phos; 3/16-3+ starch; 3/29-rare tri phos; 4/6-4+ tri phos

Bacteria-2/28-loaded

Comments-3/27-rare protozoans; 3/29-2+ protozoans

Note: Day 1 = Day of Treatment (Rx)
**48 hours post 1st Rx vehicle
***48 hours post 2nd Rx vehicle

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 801

Monkey Number 801

Sex M

Experiment AID-Toxicity

Infection None

Route and Regimen Oral CGP-4540 75 mg/kg SID X 1

			**				***					
Date	1/17	1/27	2/16	2/21	2/28	3/7	3/16	3/22	3/29	4/6	4/13	4/19
Day Rx	-29	-19	+3	+8	+15	+22	+3	+9	+16	+24	+31	+37
Blood	+3	+2	+1	+1	trace	+2	+1	+3	0	+2	0	0
Glucose	0	0	trace	0	0	0	0	0	0	0	0	0
Protein	+2	0	0	0	0	+1	trace	trace	0	trace	0	0
Ketone	0	+1	trace	0	0	+4	+4	0	0	0	0	0
Bilirubin	0	0	0	0	0	0	0	0	0	0	0	0
Urobilinogen	0	0	0	0	0	0	0	0	0	0	0	0
Porphobilinogen	0	0	0	0	0	0	0	0	0	0	0	0
pH	6	8	5	7	7	5	5	7	9	6	9	8
Color	*	*	*	*	*	*	*	*	*	*	*	*
Hemoglobin	0	0	0	0	0	0	0	0	0	0	0	0
Myoglobin	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Specific Gravity	1.046	1.042	1.013	1.035	1.027	1.060	1.020	-	1.030	1.036	1.025	1.024
Epith cells	0	0	0	*	0-1	*	[illegible]	*	0	0	0	0
WBC	0	0	0	0	0-1	1-3	0	0	0	3-5	0	0
RBC	0	0	0	0	0	0-1	0	0	0	2-5	0	0
Casts	0	0	0	0	0	0	0	0	0	0	0	0
Crystals	*	*	many	*	*	*	0	0	*	0	*	0
Bacteria	0	mod	0	+4	+3	+2	+2	+4	+4	0	+4	rare
Other	0	0	0	0	0	0	0	0	0	0	0	0
Comments:	0	*	*	0	*	0	*	*	0	0	0	0

*Color-1/17-amber; 1/27, 2/16, 2/21, 2/28, 3/7, 3/16, 3/22, 3/29, 4/6, 4/13 - yellow; 4/19-light yellow

Epith cells-2/21-few squamous; 3/7, 3/16, 3/22-rare squamous

Crystals-1/17, 4/13-mod tri phosph; 1/27-many tri phosph, few amorph; 2/21-many amorph urates; 2/28-3+ tri phos; 3/7-rare Ca oxalate 3/29-many tri phos

Comments-1/27-small amt. mucus; 2/16-4-6 protozoans HPF; 2/28-rare protozoans, 3/16, 3/22-+1 protozoans

Note: Day 1 = Day of Treatment (Rx)

**48 hours post $Rx_{(1)}$ - drug

***48 hours post $Rx_{(2)}$ - drug + erythromycin

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 674

Monkey Number 674

Sex F

Experiment AID-Toxicity

Infection None

Route and Regimen Oral CGP-4540 75 mg/kg SID X 1

			**				***						
Date	1/17	1/27	2/16	2/23	2/28	3/7	3/16	3/22	3/29	4/6	4/13		
Day Rx	-29	-19	+3	-10	+15	+22	+3	+9	+16	+24	+31		
Blood	+3	trace	trace	trace	0	+1	+2	+3	+1	+1	0		
Glucose	0	+2	0	0	0	0	0	0	0	0	0		
Protein	0	0	0	0	0	0	0	0	0	0	0		
Ketone	0	0	0	0	0	0	+1	0	0	0	0		
Bilirubin	0	0	0	0	0	0	0	0	0	0	0		
Urobilinogen	0	0	0	0	0	0	0	0	0	0	0		
Porphobilinogen	0	0	0	0	0	0	0	0	0	0	0		
pH	6	5	6	6	6	6	6	7	9	6	8		
Color	*	*	*	*	*	*	*	*	*	*	*		
Hemoglobin	0	0	0	0	0	0	0	0	0	0	0		
Myoglobin	0	0	0	0	0	0	0	0	0	0	0		
Other	0	0	0	0	0	0	0	0	0	0	0		
Specific Gravity	1.007	1.009	1.011	1.022	1.016	1.030	1.007	1.005	1.012	1.009	1.005		
Epith cells	0	0	rare	*	0	*	0	0	0	*	*		
WBC	0-1	0	0	0-1	0-2	rare	0-1	0	0	0	0		
RBC	0	0	0	0-1	0-2	0	0	0	0	0	0		
Casts	0	0	0	0	0	0	0	0	0	0	0		
Crystals	-	*	0	0	0	0	0	0	*	0	0		
Bacteria	mod	+4	many	+3	+1	+4	+4	+4	+4	+4	+4		
Other	-	0		0	0				0	0	0		
Comments:	-	0	*	0	0	*	*	*	0	0	0		

*Color-1/17, 1/27, 2/16, 2/23, 2/28, 3/7, 3/16, 4/13-yellow;
3/22, 3/29, 4/6-light yellow

Epith cells-2/23, 3/7-rare renal; 4/6-mod squamous; 4/13-rare squamous

Crystals-1/27-amorph material; 3/29-many tri phos

Comments-2/16-12-17 protozoans HPF; 3/7-+4 protozoans; 3/16, 3/22-1+ protozoans

**48 hours post $Rx_{(1)}$ - drug

***48 hours post $Rx_{(2)}$ - drug + erythromycin

Note: Day 1 = Day of Treatment (Rx)

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 692

Monkey Number 692

Sex F

Experiment AID-Toxicity

Infection None

Route and Regimen Oral 75 mg/kg Erythromycin & 75 mg/kg CGP-4540, SID X 1

			**				***						
Date	1/17	1/31	2/16	2/23	3/6	3/7	3/16	3/22	3/24	4/6	4/13		
Day Rx	-29	-15	+3	+10	+21	+22	+3	+9	+16	+24	+31		
Blood	+3	trace	+2	trace	+1	0	+1	+3	0	+1	0		
Glucose	0	0	0	0	+1	0	0	0	0	0	0		
Protein	0	+1	0	+1	0	0	0	0	0	0	+1		
Ketone	0	0	+1	0	0	+1	+1	0	0	0	0		
Bilirubin	0	0	0	0	0	0	0	0	0	0	0		
Urobilinogen	0	0	0	0	0	0	0	0	0	0	0		
Porphobilinogen	0	0	0	0	0	0	0	0	0	0	0		
pH	6	7	5	8	8	6.5	6.5	6.5	9	6	9		
Color	*	*	*	*	*	*	*	*		*	*		
Hemoglobin	0	0	0	0	0	0	0	0	0	0	0		
Myoglobin	0	0	0	0	0	0	0	0	0	0	0		
Other	0	0	0	0	0	0	0	0	0	0	0		
Specific Gravity	1.012	-	1.027	1.020	-	*	1.011	1.015	1.024	1.014	1.021		
Epith cells	*	rare	0	*	occ	0	*	0	0	0	0		
WBC	0-1	0	0	0-1	0	0	0-1	0	0	0	0		
RBC	0-1	0-1	0	0-1	0	0	0	0	0	0	0		
Casts	0	0	0	0	0	0	0	0	0	0	0		
Crystals	0	0	*	*	0	0	0	*	*	0	*		
Bacteria	occ	mod	many	+4	+4	+4	+4	+4	+4	+4	+4		
Other	0	0	0	0	0	0	0	0	0	0	0		
Comments:	0	0	0	0	*	*	*	*	0	0	0		

*Color-1/17, 1/31, 2/16, 2/23, 3/6, 3/7, 3/16, 3/22, 4/6, 4/13-yellow

Specific Gravity-3/7-1.0124

Epith cells-1/17, 3/16-rare squamous; 2/23-rare renal

Crystals-2/16-many amorph urates; 2/23, 3/29, 4/13-many tri phosph; 3/22-rare Ca oxalate

Comments-3/6-3+ protozoans; 3/7-+4 protozoans; 3/16-1 yeasts, 1+ protozoans; 3/22-2+ protozoans

Note: Day 1 = Day of Treatment (Rx)

**48 hours post $Rx_{(1)}$ - drug + erythromycin

***48 hours post $Rx_{(2)}$ - drug alone

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 476

Monkey Number 476

Sex M

Experiment AID-Toxicity

Infection None

Route and Regimen Oral Erythromycin 75 mg/kg & CGP-4540 75 mg/kg SID X 1

			**				***						
Date	1/17	1/27	2/16	2/23	2/28	3/7	3/22	3/29	4/6	4/13			
Day Rx	-29	-19	+3	+10	+15	+22	+9	+16	+24	+31			
Blood	+1	+1	+1	trace	0	+1	+4	trace	+1	0			
Glucose	0	0	0	0	0	0	0	0	0	0			
Protein	0	+2	0	0	0	0	0	0	0	0			
Ketone	0	0	0	0	0	+1	0	0	0	0			
Bilirubin	0	0	+2	0	0	0	0	0	0	0			
Urobilinogen	0	0	0	0	0	0	0	0	0	0			
Porphobilinogen	0	0	0	0	0	0	0	0	0	0			
pH	6	7	5.5	6	6	6.5	8	7	6	6			
Color	*	*	*	*	*	*	*	*	*	*			
Hemoglobin	0	0	0	0	0	0	0	0	0	0			
Myoglobin	0	0	0	0	0	0	0	0	0	0			
Other	0	0	0	0	0	0	0	0	0	0			
Specific Gravity	1.008	1.037	1.010	1.009	1.011	1.017	1.009	1.007	1.010	1.003			
Epith cells	*	0	0	0	0	0	0	0	0	0			
WBC	1-2	0	0	0-1	0-2	rare	rare	0	0-1	0			
RBC	0-1	0-2	0-1	0-2	0	0	rare	0	0-4	0			
Casts	0	0	0	0	0	0	0	0	0	0			
Crystals	0	*	*	0	0	0	0	0	0	0			
Bacteria	occ	many	+4	+3	+4	+3	0	+4	+4	+4			
Other	0	0	0	0	0	0	0	0	*	0			
Comments:	0	0	0	0	*	*	*	0	0	0			

*Color-1/17, 1/27, 2/16, 2/23, 2/28, 3/7, 3/22-yellow; 3/29-white; 4/6, 4/13-light yellow

Epith cells-1/17-occ. squamous

Crystals-1/27-mod tri phos; 2/16-amorph urates

Other-4/6-rare protozoans

Comments-2/28-rare protozoa; 3/7-3+ protozoa; 3/22-1+ protozoans

Note: Day 1 = Day of Treatment (Rx)

**48 hours post $Rx_{(1)}$ - drug + erythromycin

*** 9 days post $Rx_{(2)}$ - drug

Table V Summary of Urinalysis Results in *Cebus apella* Monkey # 577

Monkey Number 577

Sex F

Experiment AID-Efficacy

Infection *S. mansoni* (WRAIR)

Route and Regimen Oral, Control-Vehicle SID X 1

Date	1/17	1/31	2/14	3/6	4/18	4/19							
Day Rx	-82	-68	-54	-32	+9	10							
Blood	+3	+1	+2	trace	+2	+4							
Glucose	0	0	0	0	0	0							
Protein	trace	trace	0	0	0	+2							
Ketone	0	+1	0	+4	0	0							
Bilirubin	0	0	0	0	0	0							
Urobilinogen	0	0	0	0	0	0							
Porphobilinogen	0	0	0	0	0	0							
pH	7	5	7	6	7	6							
Color	*	*	*	*	*	*							
Hemoglobin	0	0	0	0	0	0							
Myoglobin	0	0	0	0	0	0							
Other	0	0	0	0	0	0							
Specific Gravity	1.026	1.012	1.015	1.022	1.020	1.039							
Epith cells	*	0	0	0	0	0							
WBC	0-1	1-2	0	0	0	0							
RBC	0-1	2-4	0-2	0	5-10	0							
Casts	0	0	0	0	0	0							
Crystals	*	0	0	0	*	*							
Bacteria	-	many	many	+4	+4	0							
Other	-	0	0	0	0	0							
Comments:	-	0	0	*	*	*							

* Color-1/17, 1/31, 2/14, 3/6, 4/18-yellow 4/19-amber

Epith cells-rare squamous

Crystals-1/17-mod triphosph, 4/18-many amorph material, 4/19-few ca-oxalate

Comments-3/6-few protozoan, 4/18-+3 protozoan, 4/19-+1 protozoan

Note: Day 1 = Day of Treatment (Rx)

Table V Summary of Urinalysis Results in *Cebus apella* Monkey # 907

Monkey Number 907

Sex M

Experiment AID-Efficacy

Infection *S. mansoni* (WRAIR)

Route and Regimen Oral Control Vehicle SID X 1

Date	1/18	1/31	2/14	3/6	4/11	4/19	4/29	5/2	5/11	5/18			
Day Rx	-81	-68	-54	-32	+3	10	20						
Blood	0	+2	+1	0	trace	+2	+3	0		0			
Glucose	0	0	0	0	0	0	0	0		0			
Protein	0	0	0	0	0	0	0	trace		0			
Ketone	0	+1	0	0	0	0	0	0		0			
Bilirubin	0	0	0	0	0	0	0	0		0			
Urobilinogen	0	0	0	0	0	0	0	0		0			
Porphobilinogen	0	0	0	0	0	0	0	0		0			
pH	6	5	5	5	6	6	6	6		5			
Color	*	*	*	*	*	*	*	*		*			
Hemoglobin	0	0	0	0	0	0	0	0		0			
Myoglobin	0	0	0	0	0	0	0	0		0			
Other	0	0	0	0	0	0	0	0		0			
Specific Gravity	1.007	1.005	1.003	1.006	1.005	1.020	1.025	1.031		1.008			
Epith cells	0	0	*	0	0	*	0	*		0			
WBC	0	0-1	0	0	0	0	0	0		0			
RBC	0	0-1	0-1	0	0	0	0	0		0			
Casts	0	0	0	0	0	0	0	0		0			
Crystals	*	0	0	0	0	0	0	0		0			
Bacteria	0	many	many	+4	+4	+1	0	+3		+4			
Other	0	0	*	0	0	0							
Comments:	0	0		0	*	*	*	*					

*Color-1/18, 1/31, 3/6, 4/29, 5/2-yellow; 2/14, 4/11, 4/19, 5/18-light yellow

Epith cells-2/14-rare squamous; 4/19-few squamous; 5/2-mod squamous epith

Crystals-1/18-amorph material Other-2/14-many yeasts

Comments-4/11,4/19, 5/2-2+ protozoans; 4/29-4+ yeasts

**48 hours post 1st Rx

Note: Day 1 = Day of Treatment (Rx)

Table V Summary of Urinalysis Results in *Cebus apella* Monkey # 576

Monkey Number 576

Sex M

Experiment AID-Efficacy

Infection *S. mansoni* (WRAIR)

Route and Regimen CGP-4540 10 mg/kg & Erythromycin 50 mg/kg SID X 1

Date	1/19	1/31	2/14	3/6	4/18*								
Day Rx	-80	-68	-54	-32	+8								
Blood	0	+3	+2	0	0								
Glucose	0	0	0	trace	0								
Protein	0	+1	trace	+1	0								
Ketone	+4	+2	0	0	0								
Bilirubin	0	0	0	0	0								
Urobilinogen	0	0	0	0	0								
Porphobilinogen	0	0	0	0	0								
pH	8	6	6	7	6								
Color	*	*	*	*	*								
Hemoglobin	0	0	0	0	0								
Myoglobin	0	0	0	0	0								
Other	0	0	0	0	0								
Specific Gravity	1.040	1.038	1.025	1.042	1.004								
Epith cells	0	mod	*	*	0								
WBC	0	0	0-1	0	0								
RBC	0	0	1-2	0	0								
Casts	0	0	0	0	0								
Crystals	*	0	0	0	0								
Bacteria	many	few	mod	+4	+4								
Other	0	0	0	0	0								
Comments:	0	0	0	*	*								

*Color-1/19, 1/31, 2/14, 3/6-yellow, 4/18-light yellow

Epith cells- 2/14-mod squam, 3/6-normal

Crystals- 1/19-many tri phosph, many amorph material

Comments- 3/6-+3 protozoan, 4/18-+2 protozoan

Note: Day 1 = Day of Treatment (Rx)
*7 days after Rx

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 155

Monkey Number 155

Sex F

Experiment AID-Efficacy

Infection *S. mansoni* (WRAIR)

Route and Regimen CGP-4540 10 mg/kg & Erythromycin 50 mg/kg SID X 1
Re-Rx (CGP-4540 25 mg/kg, Erythromycin 50 mg/kg

Date	1/18	1/31	2/14	3/6	4/18*	4/19	4/25	5/2	5/11**	5/18			
Day Rx	-81	-68	-54	-32	9	10	10	23	32	39			
Blood	0	+1	+2	0	+2	+4	0	0	0	0			
Glucose	0	0	0	0	0	0	0	0	0	0			
Protein	+1	trace	trace	+2	+2	0	+1	trace	0	+1			
Ketone	0	+1	0	trace	0	0	trace	0	0	0			
Bilirubin	0	0	0	0	0	0	0	0	0	0			
Urobilinogen	0	0	0	0	0	0	0	0	0	0			
Porphobilinogen	0	0	0	0	0	0	0	0	0	0			
pH	7	5	6	6.5	7	6	5.5	6	6	7			
Color	*	*	*		*	*	*	*	*	*			
Hemoglobin	0	0	0	0	0	0	0	0	0	0			
Myoglobin	0	0	0	0	0	0	0	0	0	0			
Other	0	0	0	0	0	0	0	0	0	0			
Specific Gravity	1.065	1.023	1.030	1.057	1.090	1.045	1.050	1.046	1.062	1.052			
Epith cells	0	few	*	*	0	0	*	mod	few	0			
WBC	0	0-1	5-10	0	0	0	rare	2-4	0	0-1			
RBC	0-1	0-1	10-15	0	0	0	0	0	5-10	0-1			
Casts	0	0	0	0	0	0	0	0	0	0			
Crystals	*	0	0	*	0	0	0	rare	0	*			
Bacteria	0	many	many	+4	+4	+3	0	0	0	0			
Other	0	0	0	0	0	0	0	0	0	0			
Comments:	0	*	0	*	0	*	*	0	0	0			

*Color-1/18, 1/31, 2/14, 4/19, 4/25, 5/2, 5/11, 5/18-yellow; 4/18-amber

Epith cells-2/14-few squamous; 3/6-rare squamous; 4/25-rare squamous, rare renal

Crystals-1/18-mod tri phosph, amorph material; 3/6-+1 tri phosph; 5/18-+4 tri phos

Comments-1/31-many yeasts; 3/6-+3 protozoan; 4/19-few protozoan; 4/25-rare protozoan

Note: Day 1 = Day of Treatment (Rx)
*8 days post $Rx_{(1)}$
**7 days post $Rx_{(2)}$

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 565

Monkey Number 565

Sex F

Experiment AID-Efficacy

Infection *S. mansoni* (WRAIR)

Route and Regimen Oral CGP-4540 10 mg/kg SIDX1
Re Rx 25 mg/kg SID X 1

Date	1/18	1/31	2/13	3/6	4/11**	4/19	4/25	'2	5/11***	5/18			
Day Rx	-81	-65	-55	-32	+2	10	+16	23	32	39			
Blood	+3	0	trace	trace	+4	+4	+1	+1	0	+1			
Glucose	0	0	0	trace	0	0	0	0	0	0			
Protein	trace	0	0	trace	trace	trace	+1	0	0	trace			
Ketone	0	+1	0	0	0	+4	+3	0	0	0			
Bilirubin	0	0	0	0	0	0	0	0	0	0			
Urobilinogen	0	0	0	0	0	0	0	0	0	0			
Porphobilinogen	0	0	0	0	0	0	0	0	0	0			
pH	6	5	6	8	6.5	6	6	5	6	7			
Color	*	*	*	*	*	*	*	*	*	*			
Hemoglobin	0	0	0	0	0	0	0	0	0	0			
Myoglobin	0	0	0	0	0	0	0	0	0	0			
Other	0	0	0	0	0	0	0	0	0	0			
Specific Gravity	1.044	1.012	1.015	1.042	1.018	1.027	1.030	1.012	1.016	1.024			
Epith cells	0	rare	0	*	0	0	0	*	rare	0			
WBC	0	0	0	0	0	0-1	0	0	0-1	0-1			
RBC	5-10	0	0	0	0	0	0	0	0	0			
Casts	0	0	0	0	0	0	0	0	0	0			
Crystals	*	0	0	0	0	0	0	0	0	few			
Bacteria	0	*	many	+3	+4	+2	+2	mod	+4	+4			
Other	0	0	0	0	0	0	0	0	*	0			
Comments:	0	0	*	*	*	0	*	0	0	0			

*Color-1/18, 3/6, 4/11, 4/19, 4/25, 5/11, 5/18-yellow; 1/31, 2/13, 5/2-light yellow

Epith cells-3/6-rare squamous; 5/2-rare squamous epith

Crystals-1/18-occ tri phosph, amorph material

Bacteria-1/31-loaded

Other-5/11-few yeasts

Comments-2/13-few protozoans; 3/6-+3 protozoan; 4/11, 4/25-+2 protozoan

Note: Day 1 = Day of Treatment (Rx)

**24 hours post $Rx_{(1)}$ - 10 mg/kg CGP-4540

***7 days post $Rx_{(2)}$

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 581

Monkey Number 581

Sex M

Experiment AID-Efficacy

Infection *S. mansoni* (WRAIR)

Route and Regimen Oral CGP-4540 10 mg/kg SID X
Re Rx 25 mg/kg SID X 1

Date	1/17	1/31	2/14	3/6	4/18	4/19	4/25	5/2	5/11	5/18			
Day Rx	-82	-68	-54	-32	+9	10	16	23	32	39			
Blood	0	+3	0	0	trace	trace	0	0	0	0			
Glucose	0	0	0	0	0	0	0	0	0	0			
Protein	trace	+2	0	+1	0	trace	+1	trace	0	+2			
Ketone	0	0	0	0	0	0	+3	0	0	0			
Bilirubin	0	0	0	0	0	0	0	0	0	0			
Urobilinogen	0	0	0	0	0	0	0	0	0	0			
Porphobilinogen	0	0	0	0	0	0	0	0	0	0			
pH	6	6	6	7	8	6	5	5	6	6			
Color	*	*	*	*	*	*	*	*	*	*			
Hemoglobin	0	0	0	0	0	0	0	0	0	0			
Myoglobin	0	0	0	0	0	0	0	0	0	0			
Other	0	0	0	0	0	0	0	0	0	0			
Specific Gravity	1.033	1.09	1.035	1.051	1.020	1.070	1.050	1.052	1.045	1.076			
Epith cells	*	mod	*	*	0	0	*	0	0-1	*			
WBC	35-40	0	0	0	0	0	rare	0-1	0	0			
RBC	10-15	2-5	0	0	0	0	0	0	0	0			
Casts	0	0	0	0	0	0	0	0	0	0			
Crystals	0	*	0	*	0	*	*	0	0	0			
Bacteria	mod	0	many	+4	+4	0	+2	+4	+4	+3			
Other	0	*	0	0	0	0	0		0	0			
Comments:	0	0	0	*	*	*	*	*	0	0			

*Color-1/17, 2/14, 3/6, 4/18, 4/19, 4/25, 5/2, 5/11, 5/18-yellow; 1/31-amber

Epith cells-1/17-mod squamous; 2/14, 3/6, 4/25-rare squamous; 5/18-few sq. epith.

Crystals-1/31-trace tri-phosph; 3/6-+3tri-phos; 4/19-+3 uric acid +2 Ca oxalate; 4/25-rare Ca oxalate

Other-1/31-mod yeast

Comments-3/6, 4/19-3+ protozoa; 4/18, 4/25-2+ protozoa; 5/2-1+ protozoa (rare larva)

Note: Day 1 = Day of Treatment (Rx)

Table V Summary of Urinalysis Results in *Cebus apella* Monkey # 475

Monkey Number 475

Sex M

Experiment AID-Efficacy

Infection *S. japonicum* (Philippine)

Route and Regimen Oral Control Vehicle SID X1

Date	1/19	2/23	3/16	4/6	4/21 *	4/29	5/5 **	5/11	5/18				
Day Rx	-91	-56	-35	-14	+1	9	15	21	28				
Blood	0	0	0	0		0	trace		0				
Glucose	0	0	0	0		0	0		0				
Protein	0	+1	+1	+1		+1	trace		+2				
Ketone	0	0	0	+1		0	0		trace				
Bilirubin	0	0	0	0		0	0		0				
Urobilinogen	0	0	0	0		0	0		0				
Porphobilinogen	0	0	0	0		0	0		0				
pH	6	7.5	8	6		7	7		8				
Color	*	*	*	*		*	*		*				
Hemoglobin	0	0	0	0		0	0		0				
Myoglobin	0	0	0	0		0	0		0				
Other	0	0	0	0		0	0		0				
Specific Gravity	1.001	1.035	1.030	1.040		1.035	1.027		1.030				
Epith cells	0	0	0	*		0	0		0				
WBC	0	0	0	0		0	0		0				
RBC	0	0-2	0	0		0	0-1		0				
Casts	0	0	0	0		0	0		0				
Crystals	0	*	*	0		many	0		many				
Bacteria	many	+2	+4	0		0	+4		few				
Other	0	0	0	0		0	0		0				
Comments:	0	0	*	0		0	*		0				

*Color-1/19, 2/23, 3/16, 4/6, 4/29, 5/5-yellow; 5/18-light yellow

Epith cells-4/6-rare squamous

Crystals-2/23-few tri phosph; 3/16-+2 tri phosph

Comments-3/16-+1 protozoans; 5/5-few protozoans

Note: Day 1 = Day of Treatment (Rx)

*24 hours post $Rx_{(1)}$-vehicle

**24 hours post $Rx_{(2)}$-vehicle

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 636

Monkey Number 636

Sex F

Experiment AID-Efficacy

Infection *S. japonicum* (Philippine)

Route and Regimen Oral Control Vehicle SID X

					*		**						
Date	1/19	2/24	3/16	4/6	4/21	4/29	5/5	5/11	5/18				
Day Rx	-91	-55	-35	-14		9	15	21	28				
Blood	+1	trace	trace	+3		0	trace	0	+1				
Glucose	0	0	0	0		0	0	0	0				
Protein	+1	+2	1	0		+2	0	+1	+1				
Ketone	0	0	0	0		0	0	0	0				
Bilirubin	0	0	0	0		0	0	0	0				
Urobilinogen	0	0	0	0		0	0	0	0				
Porphobilinogen	0	0	0	0		0	0	0	0				
pH	5	6	5.5	6		6	6	6	7.5				
Color	*	*	*	*		*	*	*	*				
Hemoglobin	0	0	0	0		0	0	0	0				
Myoglobin	0	0	0	0		0	0	0	0				
Other	0	0	0	0		0	0	0	0				
Specific Gravity	1.060	1.043	1.034	1.024		1.037	1.015	1.035	1.029				
Epith cells	few	0	*	0		0-1	mod	0	0				
WBC	0	0	0-2	0-1		0	0	0-2	0				
RBC	0	2-4	0	4-8		0	0	0-1	0				
Casts	0	0	0	0		0	0	0	0				
Crystals	*	*	0	0		0	*	0	*				
Bacteria	many	0	+3	+4		0	+4	+4	+4				
Other	0	0	0	0		0	0	0	0				
Comments:	0	0	0	0		0	*	0	0				

*Color-1/19, 2/24, 3/16, 4/6, 4/29, 5/11, 5/18-yellow; 5/5-light yellow.

Epith cells-3/16-rare renal

Crystals-1/19-few tri phosph; 2/24-many amorph urates; 5/5-rare tri phos; 5/18-many tri phos

Comments-5/5-mod protozoans

Note: Day 1 = Day of Treatment (Rx)

*24 hours post $Rx_{(1)}$

**24 hours post $Rx_{(2)}$

Table V Summary of Urinalysis Results in *Cebus apella* Monkey # 489

Monkey Number 489

Sex M

Experiment AID-Efficacy

Infection *S. japonicum* (Philippine)

Route and Regimen Oral CGP-4540 Rx_1= 10 mg/kg SID X1

Rx_2=25 mg/kg

Date	1/31	3/16	4/6	4/21 *	4/27	5/2	5/5 **	5/11	5/18				
Day Rx	-79	-35	-14	+1	+7	+12	15	21	28				
Blood	+3	0	+1	-	-	+2	trace	0	0				
Glucose	0	0	0	-	-	0	0	0	0				
Protein	0	0	0	-	-	0	0	0	0				
Ketone	0	0	0	-	-	0	0	0	0				
Bilirubin	0	0	0	-	-	0	0	0	0				
Urobilinogen	0	0	0	-	-	0	0	0	0				
Porphobilinogen	0	0	0	-	-	0	0	0	0				
pH	6	6.5	7	-	-	7	7	6	7				
Color	*	*	*	-	-	*	*	*	*				
Hemoglobin	0	0	0	-	-	0	0	0	0				
Myoglobin	0	0	0	-	-	0	0	0	0				
Other	0	0	0	-	-	0	0	0	0				
Specific Gravity	1.007	1.005	0	-	-	1.007	1.015	1.007	1.005				
Epith cells	0	0	*	-	-	0	few	few	0				
WBC	0	0	0	-	-	0-1	0-1	0	0				
RBC	0-1	0	0	-	-	0	0	0	0				
Casts	0	0	0	-	-	0	0	0	0				
Crystals	*	0	0	-	-	0	0	0	0				
Bacteria	0	+4	+4	-	-	mod	+4	+4	+4				
Other	0	0	0	-	-	0	0	0	0				
Comments:	*	*	*	-	-	0	0	0	0				

*Color-1/31, 3/16, 5/2, 5/18-light yellow; 4/6, 5/5, 5/11-yellow

Epith cells-4/6-few squamous

Crystals-1/31-Much amorph material

Comments-1/31-protozoans; 3/16-+1 protozoans; 4/6-few yeasts

Note: Day 1 = Day of Treatment (Rx)

*24 hours post $Rx_{(1)}$-10mg/kg CGP-4540

**24 hours post $Rx_{(2)}$-25mg/kg CGP-4540

Table V' Summary of Urinalysis Results in

Cebus apella Monkey # 445

Monkey Number 445

Sex F

Experiment AID-Efficacy

Infection *S. japonicum* (Philippine)

Route and Regimen Oral CGP-4540 Rx_1=10 mg/kg SID X 1

Rx_2=25 mg/kg SID X 1

Date	1/18	1/31	2/23	3/16	4/6	4/21 *	4/29	5/5 **	5/11	5/18			
Day Rx	-92	-79	-56	-35	-14	+1	9	15	21	28			
Blood	+1	trace	0	+1	+2	-	0	+4	-	0			
Glucose	0	0	0	0	0	-	0	0	-	0			
Protein	0	0	0	0	0	-	+2	0	-	0			
Ketone	0	0	0	0	0	-	0	0	-	0			
Bilirubin	0	0	0	0	0	-	0	0	-	0			
Urobilinogen	0	0	0	0	0	-	0	0	-	0			
Porphobilinogen	0	0	0	0	0	-	0	0	-	0			
pH	8	6	7	6.5	8	-	6	7	-	7			
Color	*	*	*	*	*	-	*	*	-	-			
Hemoglobin	0	0	0	0	0	-	0	0	-	0			
Myoglobin	0	0	0	0	0	-	0	0	-	0			
Other	0	0	0	0	0	-	0	0	-	0			
Specific Gravity	1.075	1.110	1.005	1.006	1.023	-	1.010	1.018	-	1.011			
Epith cells	many	many	*	0	0	-	rare	0	-	0			
WBC	3-5	0-1	0	0	0	-	0	0	-	0			
RBC	5-10	0	0	0	0	-	0	0-3	-	0			
Casts	0	0	0	0	0	-	0	0	-	0			
Crystals	0	0	*	0	*	-	0	*	-	0			
Bacteria	many	0	+4	+4	+4	-	0	+4	-	+4			
Other	0	0	0	0	0	-	*	0	-	*			
Comments:	0	*	*	0	0	-	0	0	-	*			

*Color-1/18, 1/31, 2/23, 4/6-yellow; 3/16, 4/29-light yellow; 5/5-bright yellow

Epith cells-2/23-rare renal

Crystals-2/23-amorph material; 4/6-4+ tri phosph; 5/5-few tri phos

Other-4/29-0-1 renal epith; 5/18-rare yeasts

Comments-1/31-few yeasts; 2/23-few protozoans; 5/18-rare protozoans

Note: Day 1 = Day of Treatment (Rx)
*24 hours post $Rx_{(1)}$-10mg/kg CGP-4540
**24 hours post $Rx_{(2)}$-25mg/kg CGP-4540

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 905

Monkey Number 905

Sex M

Experiment AID-Efficacy

Infection *S. haematobium* (Egypt)

Route and Regimen Oral-Vehicle Control

Date	1/17	1/27	2/14	3/6	4/25								
Day Rx	-125	-115	-97	-77	-27								
Blood	+3	0	0	0	+1								
Glucose	0	0	0	trace	0								
Protein	trace	0	0	+1	+1								
Ketone	0	+1	0	trace	+4								
Bilirubin	0	0	0	0	0								
Urobilinogen	0	0	0	0	0								
Porphobilinogen	0	0	0	0	0								
pH	6	5	6	6.5	7								
Color	*	*	*	*	*								
Hemoglobin	0	0	0	0	0								
Myoglobin	0	0	0	0	0								
Other	0	0	0	0	0								
Specific Gravity	1.025	1.025	1.030	1.033	1.038								
Epith cells	*	rare	*	0	0								
WBC	7-9	0-1	0	rare	0								
RBC	9-10	0-1	0	0	0								
Casts	0	0	1	0	0								
Crystals	0	0	*	0	0								
Bacteria	mod	many	many	+3	+4								
Other	0	0	0	0	0								
Comments:	0	0	0	*	*								

*Color-1/17,1/27,2/14,3/6,4/25-yellow

Epith cells-1/17,2/14-mod squam

Crystals- 2/14-few ammonium urates

Comments-3/6/78-rare protozoan, 4/25-+3 protozoan

Note: Day 1 = Day of Treatment (Rx)

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 552

Monkey Number 552

Sex F

Experiment AID-Efficacy

Infection *S. haematobium* (Egypt)

Route and Regimen Oral-Control-Vehicle

Date	1/17	1/27	2/14	3/6	4/25								
Day Rx	-125	-115	-97	-77	-27								
Blood	+3	0	+4	trace	trace								
Glucose	0	0	0	0	0								
Protein	trace	0	0	0	0								
Ketone	0	0	0	0	0								
Bilirubin	0	0	0	0	0								
Urobilinogen	0	0	0	0	0								
Porphobilinogen	0	0	0	0	0								
pH	7	6	6	5.5	9								
Color	*	*	*	*	*								
Hemoglobin	0	0	0	0	0								
Myoglobin	0	0	0	0	0								
Other	0	0	0	0	0								
Specific Gravity	1.023	1.005	1.010	1.009	1.012								
Epith cells	*	0	0	*	*								
WBC	*	0	0-1	0	0								
RBC	0-1	0	2-4	0	0								
Casts	0	0	0	0	0								
Crystals	0	0	0	0	0								
Bacteria	mod	many	many	+4	+4								
Other	0	0	0	0	0								
Comments:	0	0	0	*	*								

*Color-1/17, 1/27, 2/14, 3/6, 4/25-yellow

Epith cells-1/17-occ. squam, 3/6, 4/25-rare squam

WBC-1/17-10-15

Comments-3/6-+3 protozoans, 4/25-rare protozoan

Note: Day 1 = Day of Treatment (Rx)

Table V Summary of Urinalysis Results in

Cebus apella Monkey # 901

Monkey Number 901

Sex M

Experiment AID-Efficacy

Infection *S. haematobium* (Egypt)

Route and Regimen CGP-4540-Oral 25 mg/kg SID X 1

Date	1/17	1/27	2/14	3/6	4/25								
Day Rx	-125	-115	-97	-77	-27								
Blood	+3	+1	0	0	+1								
Glucose	0	0	0	0	+1								
Protein	+2	0	0	0	+1								
Ketone	0	0	0	+1	+1								
Bilirubin	0	0	0	0	0								
Urobilinogen	0	0	0	0	0								
Porphobilinogen	0	0	0	0	0								
pH	6	5	5	7	6								
Color	*	*	*	*	*								
Hemoglobin	0	0	0	0	0								
Myoglobin	0	0	0	0	0								
Other	0	0	0	0	0								
Specific Gravity	1.090	1.009	1.004	1.005	1.034								
Epith cells	*	0	*	0	0								
WBC	*	0	0	rare	0								
RBC	*	2-7	0	0	0								
Casts	0	0	0	0	0								
Crystals	0	0	0	0	0								
Bacteria	occ	many	many	+3	+3								
Other	0	0	0	0	0								
Comments:	0	0	0	*	*								

*Color-1/17-amber, 1/27,1/25-yellow, 2/14-clear, 3/6-light yellow

Epith cells-1/17-mod squam, 2/14-rare squam

WBC-1/17-40-45 RBC-1/17-16-20

Comments-3/6-+4 protozoan, 4/25-+2 protozoan

Note: Day 1 = Day of Treatment (Rx)

Table V Summary of Urinalysis Results in *Cebus apella* Monkey # 551

Monkey Number 551

Sex F

Experiment AID-Efficacy

Infection *S. haematobium* (Egypt)

Route and Regimen CGP-4540 Oral, 25 mg/kg SID X 1

Date	1/17	1/27	2/14	3/6	4/25								
Day Rx	-125	-115	-97	-77	-27								
Blood	+3	+3	+2	+2	trace								
Glucose	0	+1	0	0	0								
Protein	0	+1	0	0	0								
Ketone	0	0	0	+4	0								
Bilirubin	0	0	0	0	0								
Urobilinogen	0	0	0	0	0								
Porphobilinogen	0	0	0	0	0								
pH	6	6	6	5	8								
Color	*	*	*	0	*								
Hemoglobin	0	0	0	0	0								
Myoglobin	0	0	0	0	0								
Other	0	0	0	0	0								
Specific Gravity	1.035	1.037	1.015	1.026	1.010								
Epith cells	*	rare	*	0	0								
WBC	5-7	0	0-1	rare	0								
RBC	2-4	1-5	0-1	0	0								
Casts	0	0	0	0	0								
Crystals	0	0	0	0	*								
Bacteria	occ	mod	many	+4	+4								
Other	0	0	0	0	0								
Comments:	0	0	0	*	*								

*Color-1/17,1/27,2/14,4/26-yellow

Epith cells-1/17-rare squam, 2/14-few squam

Crystals-4/25-mod tri-phosph

Comments-3/6-+3 protozoan, 4/25-+2 protozoan

Note: Day 1 = Day of Treatment (Rx)

Table VI - ECG Observation in *Cebus apella*

	Experiment	Monkey No. & Sex	Date	Time *	Heart Rate Beats/Min.	Rhythm	Comments
AID-TOXICITY (Protocol 1)	Vehicle	642 F	2/13/78	C	195-205	NSR	none
	Rx_1		2/14/78	1	256-266	NSR	none
			2/15/78	24	240	NSR	none
	Rx_2		3/14/78	C	256-265	NSR	none
			3/14/78	1	260	NSR	Tall P waves in lead 2.
			3/15/78	24	250-260	NSR	none
	Vehicle	557 M	2/13/78	lost	lost	lost	lost
	Rx_1		2/14/78	1	230	NSR	none
			2/15/78	24	240-250	NSR	none
	Rx_2		3/14/78	C	220-230	NSR	none
			3/14/78	1	230-240	NSR	none
			3/15/78	24	230-240	NSR	none
	75 mg/kg CGP-4540	801 M	2/13/78	C	250	NSR	none
			2/14/78	1	250	NSR	none
			2/15/78	24	240	NSR	none
	75 mg/kg CGP-4540 50 mg/kg Erythro-mycin		3/14/78	C	240	NSR	none
			3/14/78	1	240	NSR	none
			3/15/78	24	210-220	NSR	none
	75 mg/kg CGP-4540	674-F	2/3/78	C	250-260	NSR	P waves ↑ tall and wide.
			2/14/78	1	250-260	NSR	P waves wide & high
			2/15/78	24	250-260	NSR	none

*C = Pre-treatment
1 = 1 hour post Rx
24 = 24 hours post Rx

Table VI - ECG Observation
in *Cebus apella*

	Experiment	Monkey No. & Sex	Date	Time *	Heart Rate Beats/Min.	Rhythm	Comments
AID-TOXICITY (Protocol 1)	75 mg/kg CGP-4540 50 mg/kg Erythro-mycin		3/14/78	C	250-260	NSR	none
			3/14/78	1	230-240	NSR	none
			3/15/78	24	218-214	-	Peculiar P waves
	75 mg/kg CGP-4540 50 mg/kg Erythro-mycin	692 F	2/14/78	C	260-270	NSR	none
			2/14/78	1	210-218	NSR	none
			2/15/78	24	260	NSR	none
	75 mg/kg CGP-4540		3/14/78	C	250	-	Artifactual record.
			3/14/78	1	240	NSR	none
			3/15/78	24	200-210	NSR	none
	75 mg/kg CGP-4540 50 mg/kg Erythro-mycin	476 M	2/3/78	C	270	NSR	none
			2/14/78	1	250-260	NSR	none
			2/15/78	24	250-260	NSR	none
	75 mg/kg CGP-4540		3/14/78	C	250	NSR	none
			3/14/78	1	240-250	NSR	none
			3/15/78	24	230-240	NSR	none
AID-EFFICACY *S. mansoni*	Vehicle Rx_1	577 F	4/6/78	C	240-250	NSR	R wave 10-11 boxes at 1/2 sensitivity. T wave does not return to base line.
			4/10/78	1	260	NSR	height R waves.
			4/11/78	24	250	NSR	R waves
	Vehicle Rx_1	907 M	4/6/78	C	250	-	Small QRS complex lead 2.

*C = Pre-treatment
1 = 1 hour post Rx
24 = 24 hours post Rx

Table VI - ECG Observation
in *Cebus apella*

	Experiment	Monkey No. & Sex	Date	Time *	Heart Rate Beats/Min.	Rhythm	Comments
AID-EFFICACY *S. mansoni*		907 M Cont.	4/10/78	1	220-230	-	Complex QRST; seems abnormally low voltage.
			4/11/78	24	230-240	-	"
	Rx_2		5/4/78	1	230	NSR	Tall P waves.
			5/5/78	24	250	NSR	-
	10 mg/kg CGP-4540 50 mg/kg Erythromycin Rx_1	576 M	4/6/78	C	230	NSR	P wave appears prolonged.
			4/10/78	1	240-250	NSR	None
			4/11/78	24	250-260	NSR	None
	10 mg/kg CGP-4540 50 mg/kg Erythromycin Rx_1	155 F	4/6/78	C	270	-	Technically poor tracing.
			4/10/78	1	250	-	"
			4/11/78	24	250	-	"
	25mg/kg CGP-4540 Rx_2		5/4/78	1	300	NSR	No QRS peak in lead 2.
			5/5/78	24	270-280		Lead 2 QRS complex.
	10 mg/kg CGP-4540	565 F	4/6/78	C	250-260	NSR	None
			4/10/78	1	270	NSR	None
			4/11/78	24	230	NSR	None
			5/4/78	1	280	NSR	None
	10 mg/kg CGP-4540 Rx_1	581 M	4/6/78	C	240	NSR	None
			4/10/78	1	250-260	NSR	None
			4/11/78	24	260-270	NSR	P wave large

*C = Pre-treatment
1 = 1 hour post Rx
24 = 24 hours post Rx

Table VI - ECG Observation
in *Cebus apella*

	Experiment	Monkey No. & Sex	Date	Time *	Heart Rate Beats/Min.	Rhythm	Comments
	25 mg/kg CGP-4540 Rx_2	581 M Cont'd	5/4/78	1	280	NSR	P wave size same.
				24	270	NSR	None
AID-EFFICACY *S. japonicum*	Vehicle Rx_1	475 M	4/6/78	C	250	NSR	None
			4/20/78	3hr.	230	NSR	None
			4/21/78	24	270	NSR	None
	Vehicle Rx_2		5/4/78	1	240	NSR	T wave greatly enlarged.
				24	250-260	NSR	None
	Vehicle Rx_1	636 F	4/5/78	C	250	NSR	None
			4/20/78	3hr.	250	NSR	P waves seem
			4/21/78	24	270-280	NSR	"
	Rx_2		5/4/78	1	230-240	NSR	P waves seem
			5/5/78	24	270-280	NSR	"
	10 mg/kg CGP-4540 Rx_1	489 F	2/10/78	C	230	NSR	In lead 2 T wave slurring never returns to base-line. QRS complex
			4/20/78	3hr.	270	NSR	Large QRS complex
			4/21/78	24	225-230	NSR	"
	25 mg/kg CGP-4540 Rx_2		5/4/78	1	230	NSR	None
			5/5/78	24	240	NSR	None

*C = Pre-treatment
1 = 1 hour post Rx
24 = 24 hours post Rx

Table VI - ECG Observation
in *Cebus apella*

	Experiment	Monkey No. & Sex	Date	Time *	He -t Rate Beats/Min.	Rhythm	Comments
	10 mg/kg CGP-4540 Rx_1	445 M	4/5/78	C	190	NSR	None
			4/20/78	1	230-240	NSR	None
			4/21/78	24	230	NSR	None
	25 mg/kg CGP-4540 Rx_2		5/4/78	1	230	NSR	Enlarged T waves.
			5/5/78	24	260	NSR	T wave
AID-EFFICACY *S. haematobium*							Not applicable.

*C = Pre-treatment
1 = 1 hour post Rx
24 = 24 hours post Rx

Table VII Pathology Report for

Cebus apella Monkey # 642

Monkey Number 642

Sex F

Experiment AID-Toxicity

Date 3/15/78

Day *+30

Infection None

Route & Regimen Oral-Vehicle

Died X

Sacrificed

Moribund

Tissues Examined

x Adrenals	x Esophagus	Injection site	x Pancreas	x Thyroids
x Brain	x Eye	x Jejunum	x Parathyroid	x Urinary bladder
x Bone marrow	x Gallbladder	x Kidneys	x Pituitary	x Skin
x Cecum	x Gonads and	x Liver	x Salivary glands	x Mammary glands
x Colon	x Accessories	x Lungs	x Spleen	Thymus
x Diaphragm	x Heart	x Lymph nodes	x Stomach	Tonsils
x Duodenum	x Ileum	x Optic nerve	x Striated muscle	x Trachea
				x Spinal cord

All Tissues Normal

Tissue	Observations: Gross Pathologic Changes	Observations: Histopathologic Changes
Gastro-intestinal tract	Severe bloat & distention of (especially) stomach as well as upper small intestinal area.	Tissues taken but not yet examined.
Liver	1/2 of entire liver comprised of large cyst encased by thick fibrous (scar tissue) tissue. Small amount of pale whitish fluid inside cyst. Appeared as might be old cysticercus area.	

*Day 1 = Day of 1st Rx

Table VII Pathology Report for

Cebus apella Monkey # 557

Monkey Number 557

Sex M

Experiment AID-Toxicity

Date 4/18/78

Day* +64

Infection None

Route & Regimen Oral-Vehicle only

Died

Sacrificed x

Moribund

Tissues Examined

x Adrenals	x Esophagus	x Injection site	x Pancreas	x Thyroids
x Brain	x Eye	x Jejunum	x Parathyroid	x Urinary bladder
x Bone marrow	x Gallbladder	x Kidneys	x Pituitary	x Skin
x Cecum	x Gonads and	x Liver	x Salivary glands	x Mammary gl
x Colon	x Accessories	x Lungs	x Spleen	x Thymus
x Diaphragm	x Heart	x Lymph nodes	x Stomach	x Tonsils
x Duodenum	x Ileum	x Optic nerve	x Striated muscle	x Trachea
				x Spinal cord

All Tissues Normal

Tissue	Observations: Gross Pathologic Changes	Observations: Histopathologic Changes
Lungs	Areas of localized nematode larva.	Tissues taken but not yet examined.
Heart	Appeared larger with ventricle walls thin.	

*Day 1 = Day of 1st Rx.

Table VII Pathology Report for

Cebus apella Monkey # 801

Monkey Number 801

Sex M

Experiment AID - Toxicity

Date 4-20-78

Day *+66

Infection None

Route & Regimen Oral - drug + erythromycin, cross-over

Died

Sacrificed x

Moribund

Tissues Examined

x Adrenals	x Esophagus	x Injection site	x Pancreas	x Thyroids
x Brain	x Eye	x Jejunum	x Parathyroid	x Urinary bladder
x Bone marrow	x Gallbladder	x Kidneys	x Pituitary	x Skin
x Cecum	x Gonads and	x Liver	x Salivary glands	x Mammary glands
x Colon	x Accessories	x Lungs	x Spleen	x Thymus
x Diaphragm	x Heart	x Lymph nodes	x Stomach	x Tonsils
x Duodenum	x Ileum	x Optic nerve	x Striated muscle	x Trachea
				x Spinal cord

All Tissues Normal

Tissue	Observations: Gross Pathologic Changes	Observations: Histopathologic Changes
facial sinus	Dental fistula from right canine	Tissues taken but not yet examined
lung	Scattered areas of localized nematode larva	

*Day 1 = Day of 1st Rx

Table VII Pathology Report for
Cebus apella Monkey # 674

Monkey Number 674
Sex F
Experiment AID-Toxicity
Date 4/20/78

Day* +66
Infection None
Route & Regimen Oral-Vehicle only

Died
Sacrificed x
Moribund

Tissues Examined

x Adrenals	x Esophagus	x Injection site	x Pancreas	x Thyroids
x Brain	x Eye	x Jejunum	x Parathyroid	x Urinary bladder
x Bone marrow	x Gallbladder	x Kidneys	x Pituitary	x Skin
x Cecum	x Gonads and	x Liver	x Salivary glands	x Mammary glands
x Colon	x Accessories	x Lungs	x Spleen	x Thymus
x Diaphragm	x Heart	x Lymph nodes	x Stomach	x Tonsils
x Duodenum	x Ileum	x Optic nerve	x Striated muscle	x Trachea
				x Spinal cord

All Tissues Normal

Tissue	Observations: Gross Pathologic Changes	Observations: Histopathologic Changes
Lung	Areas of localized nematode larva.	Tissues taken but not yet examined.
Small Intestine	Petechial hemorrhage on serosal surface-apparent oesophagostmum infection.	

*Day 1 = Day of 1st Rx

Table VII Pathology Report for
Cebus apella Monkey # 692

Monkey Number 692
Sex F
Experiment AID-Toxicity
Date 4/18/78

Day* +64
Infection None
Route & Regimen Oral-Drug & Erythromycin crossover

Died
Sacrificed X
Moribund

Tissues Examined

x Adrenals	x Esophagus	x Injection site	x Pancreas	x Thyroids
x Brain	x Eye	x Jejunum	x Parathyroid	x Urinary bladder
x Bone marrow	x Gallbladder	x Kidneys	x Pituitary	x Skin
x Cecum	x Gonads and	x Liver	x Salivary glands	x Mammary glands
x Colon	x Accessories	x Lungs	x Spleen	x Thymus
x Diaphragm	x Heart	x Lymph nodes	x Stomach	x Tonsils
x Duodenum	x Ileum	x Optic nerve	x Striated muscle	x Trachea
				x Spinal cord

All Tissues Normal

Tissue	Observations: Gross Pathologic Changes	Observations: Histopathologic Changes
Lungs	Scattered areas of localized nematode larva.	Tissues taken but not yet examined.

*Day 1 = Day of 1st Rx.

Table VII' Pathology Report for

Cebus apella Monkey # 476

Monkey Number 476

Sex M

Experiment AID-Toxicity

Date 4-18-78

Day* +64

Infection none

Route & Regimen Oral - CGP-4540 + erythromycin crossover

Died

Sacrificed x

Moribund

Tissues Examined

x Adrenals	x Esophagus	x Injection site	x Pancreas	x Thyroids
x Brain	x Eye	x Jejunum	x Parathyroid	x Urinary bladde
x Bone marrow	x Gallbladder	x Kidneys	x Pituitary	x Skin
x Cecum	x Gonads and	x Liver	x Salivary glands	x Mammary glands
x Colon	x Accessories	x Lungs	x Spleen	x Thymus
x Diaphragm	x Heart	x Lymph nodes	x Stomach	x Tonsils
x Duodenum	x Ileum	x Optic nerve	x Striated muscle	x Trachea
				x Spinal cord

All Tissues Normal

Tissue	Observations: Gross Pathologic Changes	Observations: Histopathologic Changes
lungs	Areas of localized nematode larva	Tissues taken but not yet examined
vena puncture sites	Small areas of hemorrhage and bruising at sites of needle puncture.	

*Day 1 = 1st Rx

Table VII Pathology Report for

Cebus apella Monkey # 577

Monkey Number 577

Sex F

Experiment AID-Efficacy Protocol 2

Date 4-20-78

Day* +11 (1-30-78)

Infection *S. Mansoni*

Route & Regimen Oral - Vehicle

Died x

Sacrificed

Moribund

Tissues Examined

x Adrenals	x Esophagus	x Injection site	x Pancreas	x Thyroids
x Brain	x Eye	x Jejunum	x Parathyroid	x Urinary bladde
x Bone marrow	x Gallbladder	x Kidneys	x Pituitary	x Skin
x Cecum	x Gonads and	x Liver	x Salivary glands	x Mammary glands
x Colon	x Accessories	x Lungs	x Spleen	x Thymus
x Diaphragm	x Heart	x Lymph nodes	x Stomach	x Tonsils
x Duodenum	x Ileum	x Optic nerve	x Striated muscle	x Trachea
				x Spinal cord

All Tissues Normal

Tissue	Observations: Gross Pathologic Changes	Observations: Histopathologic Changes
Gastro-intestinal	Severe hemorrhage from duodenum to ileo-cecal junction. Mucosa sloughing - ulcerations.	Tissues taken but not yet examined.
Heart	Petechial hemorrhages - epicardium.	
Liver	Petechial hemorrhages, friable.	
Adrenal glands	White foci less than 1 mm on surface.	
Kidneys	Petechial hemorrhages - cortex and medulla.	
Stomach	Petechial hemorrhages.	
Mesenteric lymph node	Hemorrhagic, enlarged.	
Spleen	Petechial hemorrhages Severe anemia - hypovolemic state.	
Lungs Diaphragm	Localized nematode larva and some consolidation adhered to lung at one point.	

*Day 1 = Day of 1st Rx

Table VII Pathology Report for

Cebus apella Monkey # 576

Monkey Number 576

Sex M

Experiment AID-Efficacy Protocol 2

Date 4-16-78

Day* +7 (1-30-78)

Infection S. Mansoni

Route & Regimen Oral - CGP-4540 10 mg/kg + erythromycin 50 mg/kg

Died x

Sacrificed

Moribund

Tissues Examined

x Adrenals	x Esophagus	x Injection site	x Pancreas	x Thyroids
x Brain	x Eye	x Jejunum	x Parathyroid	x Urinary bladder
x Bone marrow	x Gallbladder	x Kidneys	x Pituitary	x Skin
x Cecum	x Gonads and	x Liver	x Salivary glands	x Mammary glands
x Colon	x Accessories	x Lungs	x Spleen	x Thymus
x Diaphragm	x Heart	x Lymph nodes	x Stomach	x Tonsils
x Duodenum	x Ileum	x Optic nerve	x Striated muscle	x Trachea
				x Spinal cord

All Tissues Normal

Tissue	Observations: Gross Pathologic Changes	Observations: Histopathologic Changes
Gastro-intestinal tract	Extensive hemorrhage along small and large intestines. Heavy mucus and blood along tract. Severe anemia - small blood volume.	Tissues taken but not yet examined.

*Day 1 = Day of 1st Rx

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 577

Monkey Number - 577 Sex - F Treatment - Vehicle				Infection Date - 1/30/78 Strain & Level of Infection - *S. mansoni* (WRAIR) 300 cercariae			
Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
2/27/78	28	-42	0				
3/2/78	31	-39	0				
3/6/78	35	-35	0				
3/9/78	38	-32	0				
3/13/78	42	-28	2				
3/16/78	45	-25	36				
3/20/78	49	-21	20				
3/23/78	52	-18	18				
3/29/78	56	-14	28				
3/30/78	59	-11	4				
4/3/78	63	- 7	4				
4/6/78	66	- 4	2				
* 4/10/78	70	1	2				
4/18/78	78	9	22				
4/20/78	80	11	62				
4/20/78	80	12	Died				

Note: * Day 1 = Day of Treatment (Rx)

Table VIII Egg Counts/Gram of Feces
in *Cebus apella* Monkey # 907

Monkey Number - 907
Sex - M
Treatment - Vehicle

Infection Date - 1/30/78
Strain & Level of Infection - *S. mansoni* (WRAIR) 300 cercariae

Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
2/27/78	28	-42	0	5/3/78	93	24	0
3/2/78	31	-39	0	**5/4/78	94	25	0
3/6/78	35	-35	0	5/8/78	98	29	0
3/9/78	38	-32	2	5/11/78	101	32	0
3/13/78	42	-28	20	5/15/78	105	36	0
3/16/78	45	-25	18	5/18/78	108	39	0
3/20/78	49	-21	14	5/22/78	112	43	0
3/23/78	52	-18	62	5/25/78	115	46	0
3/27/78	56	-14	50	5/30/78	120	51	2
3/30/78	59	-11	18				
4/3/78	63	- 7	56				
4/6/78	66	- 4	26				
* 4/10/78	70	1	90				
4/13/78	73	4	50				
4/18/78	78	9	104				
4/20/78	80	11	98				
4/24/78	84	15	10				
4/27/78	87	18	6				
5/1/78	91	22	0				
5/2/78	92	23	0				

Note: *Day 1 = Day of Treatment (Rx)
**Day 25 = Day of Retreatment

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 576

Monkey Number - 576 Sex - M 10 mg/kg CGP-4540 + Treatment - 50 mg/kg Erythromycin				Infection Date - 1/30/78 Strain & Level of Infection - *S. mansoni* (WRAIR) 300			
Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
2/27/78	28	-42	0				
3/2/78	31	-39	0				
3/6/78	35	-35	0				
3/9/78	38	-32	0				
3/13/78	42	-28	16				
3/16/78	45	-25	80				
3/20/78	49	-21	20				
3/23/78	52	-18	24				
3/27/78	56	-14	6				
3/30/78	59	-11	10				
4/3/78	63	- 7	34				
4/6/78	66	- 4	58				
* 4/10/78	70	1	62				
4/13/78	73	4	102				
4/16/78	76	7	Died				

Note: *Day 1 = Day of Treatment (Rx)

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 155

Monkey Number - 155 Infection Date - 1/30/78
Sex - F Strain & Level of Infection - *S. mansoni* (WRAIR) 300 cercariae
Treatment - 10 mg/kg, 25 mg/kg CGP-4540 + 50 mg/kg Erythromycin

Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
2/27/78	28	-42	0	** 5/8/78	98	29	2
3/2/78	31	-39	0	5/11/78	101	32	28
3/6/78	35	-35	0	5/15/78	105	36	0
3/9/78	38	-32	0	5/18/78	108	39	0
3/13/78	42	-28	4	5/22/78	112	43	0
3/16/78	45	-25	4	5/25/78	115	46	0
3/20/78	49	-21	38	5/30/78	120	51	0
3/23/78	52	-18	30				
3/27/78	56	-14	90				
3/30/78	59	-11	18				
4/3/78	63	- 7	120				
4/6/78	66	- 4	108				
* 4/10/78	70	1	172				
4/13/78	73	4	28				
4/18/78	78	9	38				
4/21/78	80	11	8				
4/24/78	84	15	16				
4/27/78	87	18	50				
5/1/78	91	22	2				
** 5/4/78	94	25	52				

Note: *Day 1 = Day of Treatment (Rx)

**Day 25 = Day of Retreatment

Table VIII Egg Counts/Gram of Feces
in *Cebus apella* Monkey # 565

Monkey Number - 565
Sex - F
Treatment - 25 mg/kg CGP-4540 ·10 mg/kg

Infection Date - 1/30/78
Strain & Level of Infection - *S. mansoni* (WRAIR) 300 cercariae

Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
2/27/78	28	-42	0	5/8/78	98	29	20
3/2/78	31	-39	0	5/11/78	101	32	418
3/6/78	35	-35	0	5/15/78	105	36	0
3/9/78	38	-32	2	5/18/78	108	39	0
3/13/78	42	-28	16	5/22/78	112	43	0
3/16/78	45	-25	38	5/25/78	115	46	4
3/20/78	49	-21	66	5/30/78	120	51	0
3/23/78	52	-18	56				
3/27/78	56	-14	50				
3/30/78	59	-11	28				
4/3/78	63	- 7	52				
4/6/78	66	- 4	160				
* 4/10/78	70	1	126				
4/13/78	73	4	60				
4/18/78	78	9	70				
4/20/78	80	11	26				
4/24/78	84	15	14				
4/27/78	87	18	54				
5/1/78	91	22	60				
** 5/4/78	94	25	206				

Note: * Day 1 = Day of Treatment (Rx)
**Day 25 = Day of Retreatment

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 581

Monkey Number - 581 Infection Date - 1/30/78
Sex - M Strain & Level of Infection - *S. mansoni* (WRAIR) 300 cercariae
Treatment - 10 mg/kg, 25 mg/kg CGP-4540

Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
2/27/78	28	-42	0	5/8/78	98	29	34
3/2/78	31	-39	0	5/11/78	101	32	292
3/6/78	35	-35	0	5/15/78	105	36	4
3/9/78	38	-32	0	5/18/78	108	39	8
3/13/78	42	-28	16	5/22/78	112	43	0
3/16/78	45	-25	10	5/25/78	115	46	18
3/20/78	49	-21	14	5/30/78	120	51	0
3/23/78	52	-18	18				
3/27/78	56	-14	36				
3/30/78	59	-11	12				
4/3/78	63	- 7	56				
4/6/78	66	- 4	158				
* 4/10/78	70	1	50				
4/13/78	73	4	16				
4/18/78	78	9	140				
4/20/78	80	11	128				
4/24/78	84	15	56				
4/27/78	87	18	86				
5/1/78	91	22	32				
** 5/4/78	94	25	128				

Note: * Day 1 = Day of Treatment (Rx)
** Day 25 = Day of Retreatment [1]

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 475

Monkey Number - 475
Sex - M
Treatment - Vehicle

Infection Date - 3/2/78
Strain & Level of Infection - *S. japonicum* (Philippine) 100

Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
3/30/78	28	-21	0				
4/3/78	32	-17	0				
4/6/78	35	-14	0				
4/10/78	39	-10	0				
4/13/78	42	- 7	4				
4/18/78	47	- 2	16				
* 4/20/78	49	1	30				
4/24/78	53	5	9				
4/27/78	56	8	36				
5/1/78	60	12	14				
** 5/4/78	64	16	82				
5/8/78	68	20	84				
5/11/78	71	23	86				
5/15/78	75	27	26				
5/18/78	78	30	134				
5/22/78	82	34	40				
5/25/78	85	37	66				
5/30/78	90	42	26				

Note: *Day 1 = Day of Treatment (Rx)

**Day 16 = Day of Retreatment

Table VIII Egg Counts/Gram of Feces
in *Cebus apella* Monkey # 636

Monkey Number - 636 Sex - F Treatment - Vehicle				Infection Date - 3/2/78 Strain & Level of Infection - *S. japonicum* (Philippine) 100			
Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
3/30/78	28	-21	0	5/25/78	85	37	2
4/3/78	32	-17	0	5/30/78	90	42	6
4/6/78	35	-14	0				
4/10/78	39	-10	0				
4/13/78	42	-7	0				
4/18/78	47	-2	8				
*4/20/78	49	1	6				
4/24/78	53	5	18				
4/27/78	56	8	30				
5/1/78	60	12	24				
**5/4/78	64	16	16				
5/8/78	68	20	4				
5/11/78	71	23	6				
5/15/78	75	27	4				
5/18/78	78	30	2				
5/22/78	82	34	8				

Note: * Day 1 = Day of Treatment (Rx)
** Day 16 = Day of Retreatment

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 489

Monkey Number - 489
Sex - M
Treatment - 10 mg/kg, 25 mg/kg CGP-4540

Infection Date -3/2/78
Strain & Level of Infection - *S. japonicum* (Philippine) 100

Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
3/30/78	28	-21	0				
4/3/78	32	-17	0				
4/6/78	35	-14	0				
4/10/78	39	-10	0				
4/13/78	42	- 7	0				
4/18/78	47	- 2	8				
* 4/20/78	49	1	32				
4/24/78	53	5	10				
4/27/78	56	8	44				
5/1/78	60	12	24				
** 5/4/78	64	16	12				
5/8/78	68	20	12				
5/11/78	71	23	26				
5/15/78	75	27	4				
5/18/78	78	30	2				
5/22/78	82	34	0				
5/25/78	85	37	0				
5/30/78	90	42	0				

Note: * Day 1 = Day of Treatment (Rx)
**Day 16 = Day of Retreatment

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 445

Monkey Number - 445 Sex - F Treatment - 10 mg/kg, 25 mg/kg CGP-4540				Infection Date - 3/2/78 Strain & Level of Infection - *S. japonicum* (Philippine) 100			
Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
3/30/78	28	-21	0				
4/3/78	32	-17	0				
4/6/78	35	-14	0				
4/10/78	39	-10	0				
4/13/78	42	- 7	0				
4/18/78	47	- 2	14				
* 4/20/78	49	1	74				
4/24/78	53	5	8				
4/27/78	56	8	44				
5/1/78	60	12	108				
** 5/4/78	64	16	26				
5/8/78	68	20	14				
5/11/78	71	23	126				
5/15/78	75	27	0				
5/18/78	78	30	0				
5/22/78	82	34	0				
5/25/78	85	37	0				
5/30/78	90	42	0				

Note: *Day 1 = Day of Treatment (Rx)

**Day 16 = Day of Retreatment

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 905

Monkey Number - 905
Sex - M
Treatment -

Infection Date - 1/30/78
Strain & Level of Infection - *S. haematobium* (Egypt) 300

Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
5/1/78	91		0				
5/4/78	94		6				
5/8/78	98		0				
5/11/78	111		0				
5/15/78	115		0				
5/18/78	118		0				
5/22/78	122		0				
5/25/78	125		0				
5/30/78	130		0				

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 552

Monkey Number - 552
Sex - F
Treatment -

Infection Date - 1/30/78
Strain & Level of Infection - *S. haematobium* (Egypt) 300

Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
5/1/78	91		0				
5/4/78	94		2				
5/8/78	98		0				
5/11/78	111		0				
5/15/78	115		2				
5/18/78	118		0				
5/22/78	122		0				
5/25/78	125		0				
5/30/78	130		0				

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 901

Monkey Number - 901 Sex - M Treatment -				Infection Date - 1/30/78 Strain & Level of Infection - *S. haematobium* (Egypt) 300			
Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count/ Gram
5/1/78	91		0				
5/4/78	94		0				
5/8/78	98		0				
5/11/78	111		18				
5/15/78	115		0				
5/18/78	118		0				
5/22/78	122		0				
5/25/78	125		0				
5/30/78	130		0				

Table VIII Egg Counts/Gram of Feces

in *Cebus apella* Monkey # 551

Monkey Number - 551 Sex - F Treatment -				Infection Date - 1/30/78 Strain & Level of Infection - *S. haematobium* (Egypt) 300			
Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count	Date of Egg Count	Day of Infection	Day Relevant to Rx	Egg Count
5/1/78	91		0				
5/4/78	94		0				
5/8/78	98		0				
5/11/78	111		0				
5/15/78	115		0				
5/18/78	118		2				
5/22/78	122		0				
5/25/78	125		0				
5/30/78	130		0				

Note: Day 1 = Day of Treatment (Rx)

Table IX Worm Burdens at Necropsy of
Cebus apella Monkey # 577

Primate Number: 577

Protocol Number: AID-Phase I

Contract Number: AID/ta-C-1312

Date of Infection: 1/30/78

Drug: CGP-4540 Control (vehicle only)

Dose(mg/kg) 0.2 ml/kg

Strain of Schistosome: WRAIR

Cercarial Number: 300

Date of Rx: 4/10/78

Date of Necropsy: 4/20/78

Total Worm Burdens: 44

Liver:

female	6
stunted female	0
dead female	0
male	4
stunted male	0
dead male	0

Mesentery:

female	19
stunted female	4
dead female	0
male	11
stunted male	0
dead male	0

% Worm Recovery Compared to Controls: NA

Egg Counts per gram of Feces:

Maximum	62
At Rx	2
At Necropsy	62

% Reduction Compared to Controls: NA

Egg Counts per 1 ml of Urine:

Maximum	NA
At Rx	
At Necropsy	

% Egg Reduction Compared to Controls: NA

Body Weight at Necropsy: 1.109

% Weight Change + or - : -11.3%

Number of Eggs/gram of Tissue:

Liver	NA
Small Intestine	
Large Intestine	
Bladder	

Egg Hatchability:

Small Intestine	NA
Large Intestine	
Liver	
Bladder	

Died 4/20/78

Sacrificed

Moribund

Table IX Worm Burdens at Necropsy of
Cebus apella Monkey # 576

Primate Number: 576

Protocol Number: AID-Phase I, Prot. 2

Contract Number: AID/ta-C-1312

Date of Infection: 1/30/78

Drug: CGP-4540

Dose(mg/kg): 10 mg/kg drug
50 mg/kg Erythromycin

Strain of Schistosome: *S. mansoni* (WRAIR

Cercarial Number: 300

Date of Rx: 4/10/78, SIDX1, Oral

Date of Necropsy: 4/16/78 Died

Total Worm Burdens: 79

Liver:

female	0
stunted female	0
dead female	36
male	0
stunted male	0
dead male	36

Mesentery:

female	0
stunted female	0
dead female	3*
male	0
stunted male	0
dead male	3* + 1** = 4

% Worm Recovery Compared to Controls: NA

Egg Counts per gram of Feces:

Maximum 102

At Rx 62

At Necropsy ND

% Reduction Compared to Controls: NA

Egg Counts per 1 ml of Urine:

Maximum ND

At Rx ND

At Necropsy ND

% Egg Reduction Compared to Controls: NA

Body Weight at Necropsy: 1014 gm

% Weight Change + or - : +10%

Number of Eggs/gram of Tissue: NA

Liver

Small Intestine

Large Intestine

Bladder

Egg Hatchability: NA

Small Intestine

Large Intestine

Liver

Bladder

Died 4/16/78

Sacrificed

Moribund

* 1 pr. in rectal vein, 2 pr. in mesenteric vein

** disintegrated male, small

Majority of worms (36 out of 39 pairs) are found in the liver, all worms are dead except one male in which very very slight movement of the anterior region (head area) was seen.

APPENDIX

APPENDIX I

Abbreviations

♀	= Female
♂	= Male
SID	= One dose given once
R_x	= Treatment
Hct	= Hematocrit
Hglb	= Hemoglobin
RBC	= Red blood count
WBC	= White blood count
Neut, 1	= Neutrophil, immature
Neut, M	= Neutrophil, mature
Lymph	= Lymphocyte
Mon	= Monocyte
Eo	= Eosinophil
Baso	= Basophil
Atyp. lymph	= Atypical lymphocyte
Retic	= Reticulocyte
Polychrom	= Polychromasia
Hypochrom	= Hypochromasia
Poik	= Poikilocyte
Sphero	= Spherocyte
Aniso	= Anisocyte
Micro	= Microcyte
Macro	= Macrocyte
Baso. stip	= Basophilic stippling
Toxic gran	= Toxic granules
MCV μ^3	= Mean corpuscular volume
MCH $\mu\mu g$	= Mean corpuscular hemoglobin
MCHC%	= Mean corpuscular hemoglobin concentration
BUN	= Blood urea nitrogen
LDH	= Lactic dehydrogenase
SGOT	= Serum glutamic oxalate transaminase
SGPT	= Serum glutamic pyruvic transaminase
Amorph	= Amorphous
Triphos	= Triple phosphate
Squam	= Squamous
Epith	= Epithelial
Mod	= Moderate
Occ	= Occasional
NSR	= Normal sinus rhythm
ECG	= Electrocardiogram
NA	= Not applicable
HPF	= High power field