

**USAID/PAHO Project for the Prevention and Control of Antimalarial Resistance in the Amazon:
Proposed Work Plan for the period October 2002 through September 2003--
Country Work Plan, Peru**

Intermediate Result 1 - Reliable and standardized malaria drug efficacy information available					
Activity	Tasks	Staff and Other Human Resources	Products	Month/Year	Remarks
1.- "Surveillance of adverse effects due to SP-AS combination therapy in the Northern Coast of	Identification of surveillance sites	Physicians in charge of malaria control at DISAs Piura, Sullana and Tumbes. National level and Macro-Regional	Adverse effects due to SP-AS combination therapy identified	October 2002- June 2003	Begun in June 02 will end in June 03
	Implementation of study	Physicians and and responsible of malaria control at selected health facilities, and a Macro-Regional supervisor			
	Supervision of field team by responsables from Macro-Region and from National levels	National level and Macro-Regional level supervisors			
	Data analysis and preparation of report	Physicians and and responsible of malaria control at selected health facilities, Macro-Regional an National level			
2.- "Surveillance of adverse effects due to MQ-AS combination therapy in the Peruvian Amazon Region".	Identification of surveillance sites	Physicians in charge of malaria control at DISAs Piura, Sullana and Tumbes. National level and Macro-Regional level supervisors	Adverse effects due to MQ-AS combination therapy identified	January - December 2003	
	Implementation of study	Physicians and and responsible of malaria control at selected health facilities, and a Macro-Regional supervisor			
	Supervision of field team by responsables from Macro-Region and from National levels	National level and Macro-Regional level supervisors			
	Data analysis and preparation of report	Physicians and and responsible of malaria control at selected health facilities, Macro-Regional an National level supervisors			
3.- Implementation of capability for evaluating anti-malarial drugs bioavailability	Base-line diagnosis of current INS capability	INS personnel	Capabilities for assesing bioavailability of antimalarial drugs installed in the INS	November 2002 - March 2003	With the collaboration of the USPDQ Initiative, a strategy for quality control of antimalarial drugs will be established.
	Training of INS personnel in bioavailability and related assays	Brazilian labs. Staff			Working/training visits to Brazilian lab funded by VIGIA
	Participation in training workshop	* Please see activity 2 under IR3			
	External quality control				Follow-up visit by Dr. Green (CDC)
4.- Implementation of reference sites for <i>in vivo</i> efficacy studies	Discussion of proposal or implementation of reference sites with DISAs, MoH central level, etc.	Directors of DISAs and personnel in charge of malaria control	Reference sites for <i>in vivo</i> efficacy studies implemented in the Peruvian Northern coast and Amazon Region	October 2002 - February 2003	Proposal already available for discussion
	Agreements with DISAs regarding sustainability of sites and trained staff at sites				
	Strengthening of capabilities of personnel in reference sites	Personnel from central level MoH, DISAs, and selected sites			
	Implementation of reference sites with complementary equipment and supplies				As required by each facility
5.- Prediction of antimalarial resistance using biomolecular markers	Complete sample collection	Personnel from DISAs'	Information on resistance to antimalarials and genotype variants for <i>P. falciparum</i> in the Peruvian Northern Coast and in the Amazon Region	October 2002 - March 2003	Quality control by reference lab to be done
	Specimen processing at INS lab	Personnel from INS and DISAs'			
6.- Evaluation of the implementation of combination therapy for <i>falciparum</i> malaria in the Peruvian Northern coast and Amazon Region	Coordination with DISAs in the Peruvian Northern coast and Amazon Region	Personnel from Central level MoH and DISAs	Informe final y publicación		
	Rapid evaluation	Personnel from Central level MoH and DISAs		[^] October 2002	In depth evaluation postponed due to delays in implementation
	In depth evaluation	Personnel from Central level MoH and DISAs		January - December 2003	
7.- Quality control of two commercial presentations of mefloquine	Coordination with INS	Personnel from INS	Quality control performed on 2 commercial presentations of mefloquine	January - March 2003	
	Performance of assays				

Activity	Tasks	Staff and Other Human Resources	Products	Month/Year	Remarks
8.- Evaluation of bioavailability of two commercial presentations of mefloquine	Revision of protocol	Personnel from INS	Bioavailability of two commercial presentations of mefloquine assessed	January 2003	During workshop
	Performance of assays	Personnel from INS			
9.- Distribution of P. falciparum strains resistant to cloroquine, to mefloquine, and to SP in the Marañon basin (Amazon area – molecular markers)	Preparation of study protocol	Personnel from INS and DISAs	Spatial distribution of resistance to different antimalarials	November 2002	
	Collection of specimens	Personnel from DISAs		January - April 2003	
	Laboratory tests	Personnel from INS		Mayo - June 2003	
	Interpretation of results and preparation of report	Personnel from INS and DISAs		July 2003	
10.- Advocacy and support for institutionalization of evaluation of efficacy and effectiveness of antimalarial drugs as part of routine activities of health services	Coordination with DISAs. Preparation of protocols to be used by health services	Personnel from Central level MoH and DISAs	Institutionalization of activities related to evaluation of efficacy and effectiveness of antimalarial drugs	November 2002- July 2003	
	Training in the tools for evaluating efficacy and effectiveness under current MoH strategy				
	Workshops for evaluation of tools and strategy				
11. Evaluation of bioequivalence of two commercial presentations of mefloquine in patients with falciparum malaria	Revision and adaptation of protocol	Personnel from INS, NAMRID and DISAs	Bioequivalence of two commercial presentations of mefloquine	April - May 2003	
	Performance of assays	Personnel from INS, NAMRID and DISAs			
	Preparation of report	Personnel from INS, NAMRID and DISAs			
12.- Efficacy evaluation of short therapy for vivax malaria (7 days cloroquine/primaquine)	Implementation of study	Personnel from DISA Piura	Efficacy of 7 days therapy assessed	January - May 2003	
	Supervision of field teams	Personnel from Central level MoH			
	Interpretation of results and preparation of report	Personnel from DISA Piura			
			Subtotal IR1		

Activity	Tasks	Staff and Other Human Resources	Products	Month/Year	Remarks
IR2 Tools and approaches developed, adapted, tested, and/or disseminated					
1. Participation in workshop on tools developed by CDC	Selection of participants	Personnel from Central level MoH, DISAs and VIGIA		Date TBD	
	Participation in workshop	Personnel from Central level MoH, DISAs and VIGIA		Place and date TBD	
	Local replica of workshop	Personnel from Central level MoH, DISAs and VIGIA		Place and date TBD	Other replicas to be funded by VIGIA
			Subtotal IR2		
IR3 Partnerships to improve malaria control in the sub-region enhanced.					
1.- Assistance in analysis of data of efficacy studies carried out in Bolivia	Coordination with MSPS and USAID in Bolivia	Personnel from INS, VIGIA, and NAMRID (5 participants)	Data analyzed and draft report ready.	Place and date TBD	Coordination with Bolivian partners pending
2. Participation in AMI Annual meeting		Personnel from Central level MoH, DISAs, and VIGIA (5 participants)		Place and date TBD	
2.- Workshop on bioavailability assays for antimalarial drugs		CDC expert, professionals from INS/Peru and from AMI countries	Personnel from AMI countries trained in bioavailability assays applicable to antimalarial drugs	February - March 2003	Coordination with CDC expert (Dr. Green) done
			Total		
INS = Instituto Nacional de Salud (National Institute for Health)					
MoH = Ministry of Health of Peru					