



MASSE CRITIQUE, DEVELOPPEMENT RESPONSABLE EN MATIERE DE SANTE ET COOPERATION INTERNATIONALE.

Experience Malienne dans le domaine du paludisme et la Medicalisation
des Zones Rurales

Ogobara K. Doumbo, USTTB, Bamako, Mali
Paris College de France, Juin 17-18, 2013

DEVELOPPEMENT SOCIO-SANITAIRE EN TANT QUE PROCESSUS D'ADAPTATION CONTINUE:

1] CO-EVOLUTION ENTRE ESPECES LINNEENNES

2] MODIFICATIONS
ECOLOGIQUES/ENVIRONNEMENTALES/SOCIETALES

3] CONNAISSANCES SCIENTIFIQUES ET TECHNIQUES

4] MODIALISATION

“ SEULES LES SOCIETES CREATIVES ET QUI PENSENT AUX
SOLUTIONS S'ENSORTENT” =>
NOTION DE MASSE CRITIQUE

NIAID/NIH

FRANCE

BMGF

**Intramural :
LMIV, LIG,
LMVR**

**Extramural:
NIAID/ DMDID/ FIC**

**Government
of Mali**

FMERIEUX

**CDC, USAID-
PMI**

MRTC/DEAP/FMPOS

AFD-IRD

**WRAIR
BMGF**

AMANET

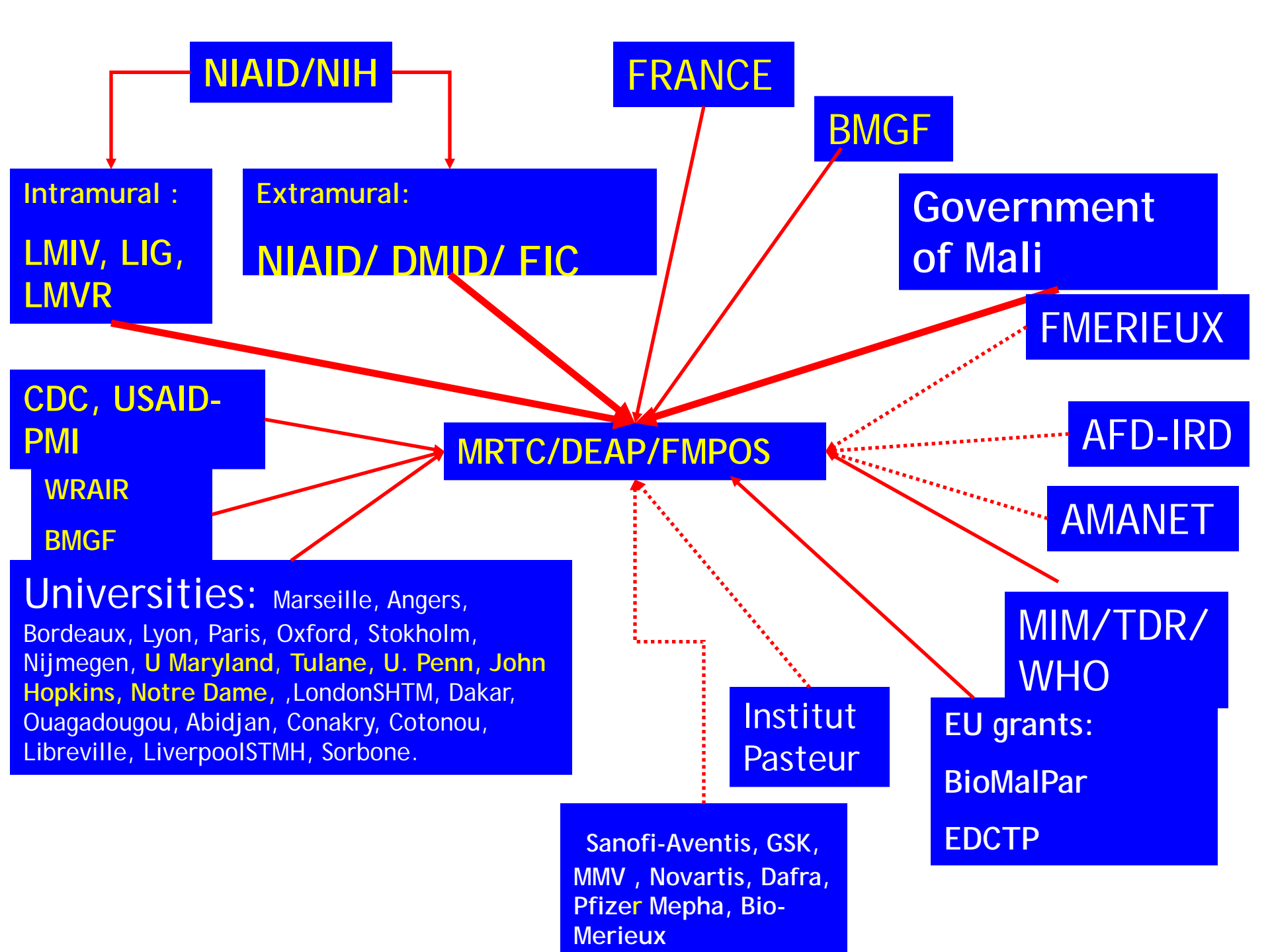
Universities: Marseille, Angers,
Bordeaux, Lyon, Paris, Oxford, Stokholm,
Nijmegen, **U Maryland, Tulane, U. Penn, John
Hopkins, Notre Dame**, LondonSHTM, Dakar,
Ouagadougou, Abidjan, Conakry, Cotonou,
Libreville, LiverpoolSTMH, Sorbone.

**MIM/TDR/
WHO**

**Institut
Pasteur**

**EU grants:
BioMalPar
EDCTP**

**Sanofi-Aventis, GSK,
MMV , Novartis, Dafra,
Pfizer Mepha, Bio-
Merieux**





Pr. (feu) RANQUE: Fondateur du DEAP, 1976

**F0.1. Génération du DEAP
Fondateurs du MRTC, 1992**

F1 Génération du MRTC/DEAP

**F2 Génération du MRTC/DEAP
F3 Génération du MRTC/DEAP
F4 Génération du MRTC/DEAP
F5 Génération du MRTC/DEAP**

Pr. (feu) Philippe RANQUE

F0.1

Pr C. Soucko

Professeur ENSUP

Pr A. Diallo

Recteur Univ. Bko

Pr Y.T. Touré

OMS- Geneva

Pr A.Touunkara

Doyen FMPOS

Pr O.K. Doumbo



Directeur PER / MRTC

F1.1

A. Dolo

O. Koita

A. Djimde

S. Doumbia

M. Diallo

M. Théra

A. Touré

S. Diop

S. Sow

F. Traoré

B. Traoré

MEDRU

F1.2

A. Dicko

O.B Touré

M. Diakité

B.Podiougou

M S Sissoko

I. Sagara

K. Kayentao

O. Thiero

A. Bea

L Sangaré

F2.3

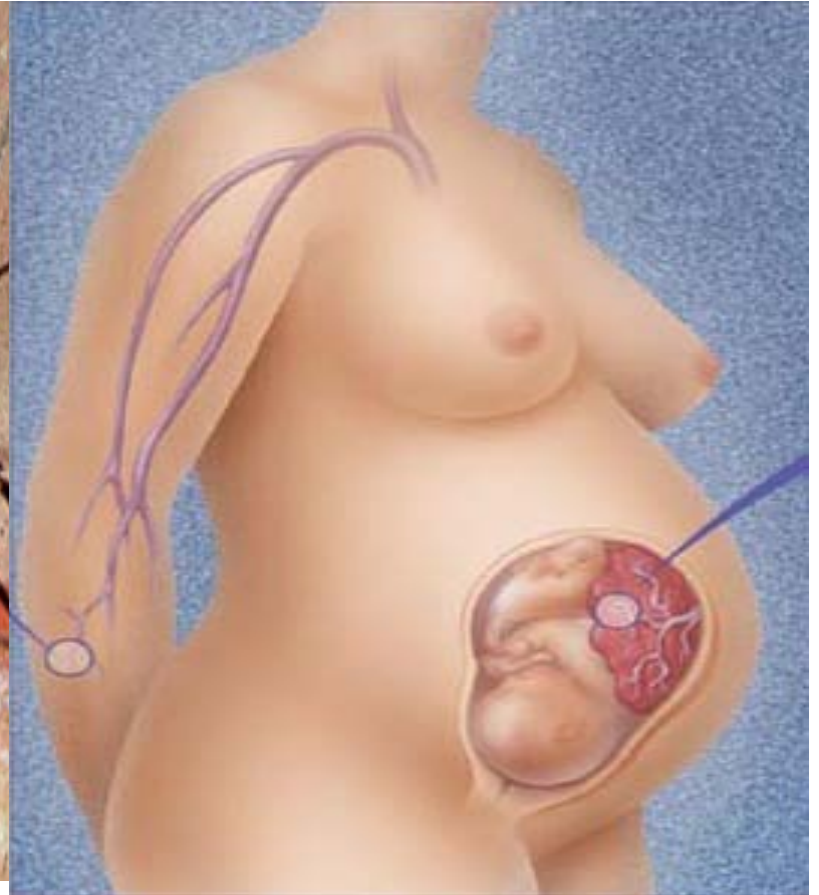
F2.4

F2.5

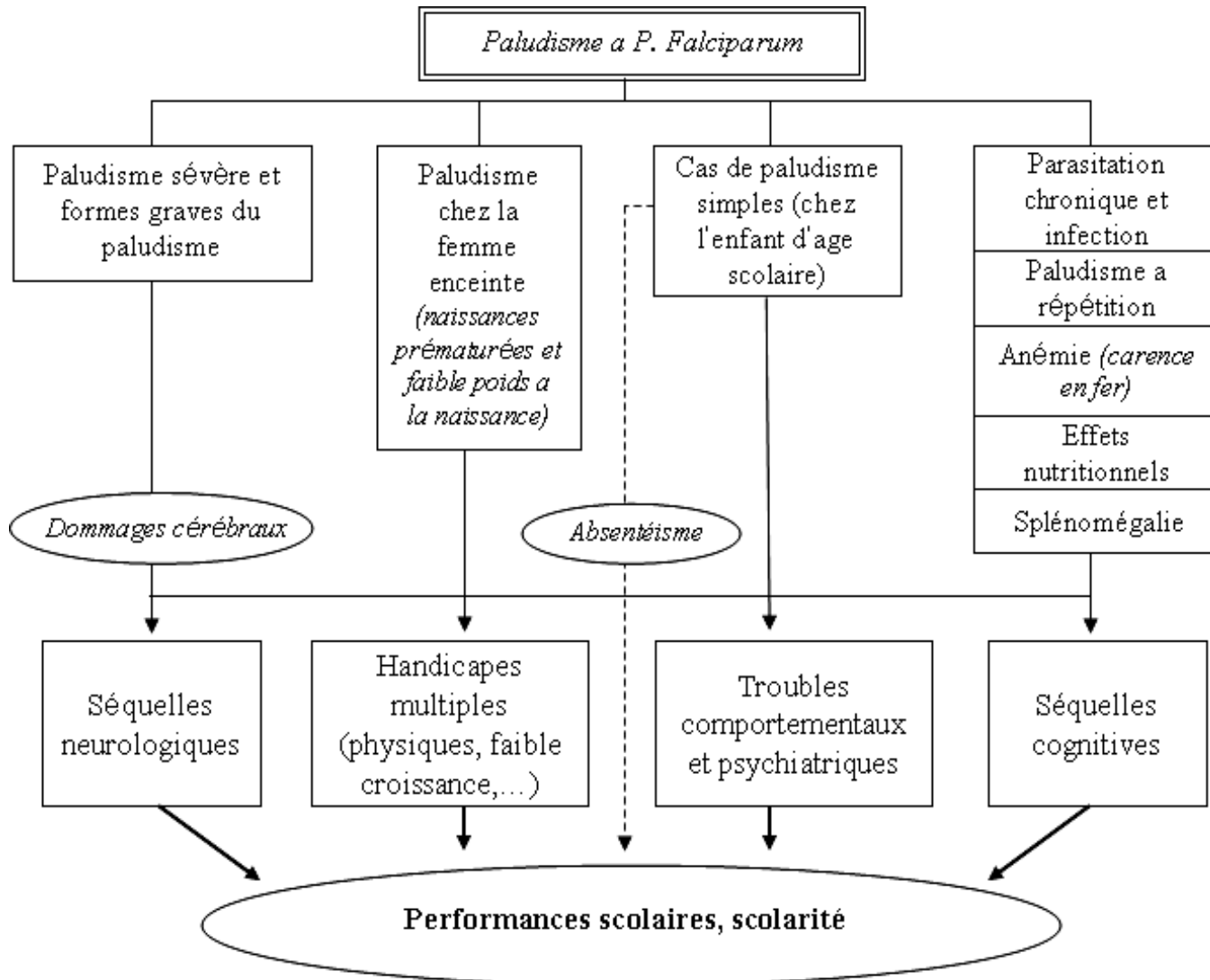
En formation Mali, Afrique, Europe, USA.

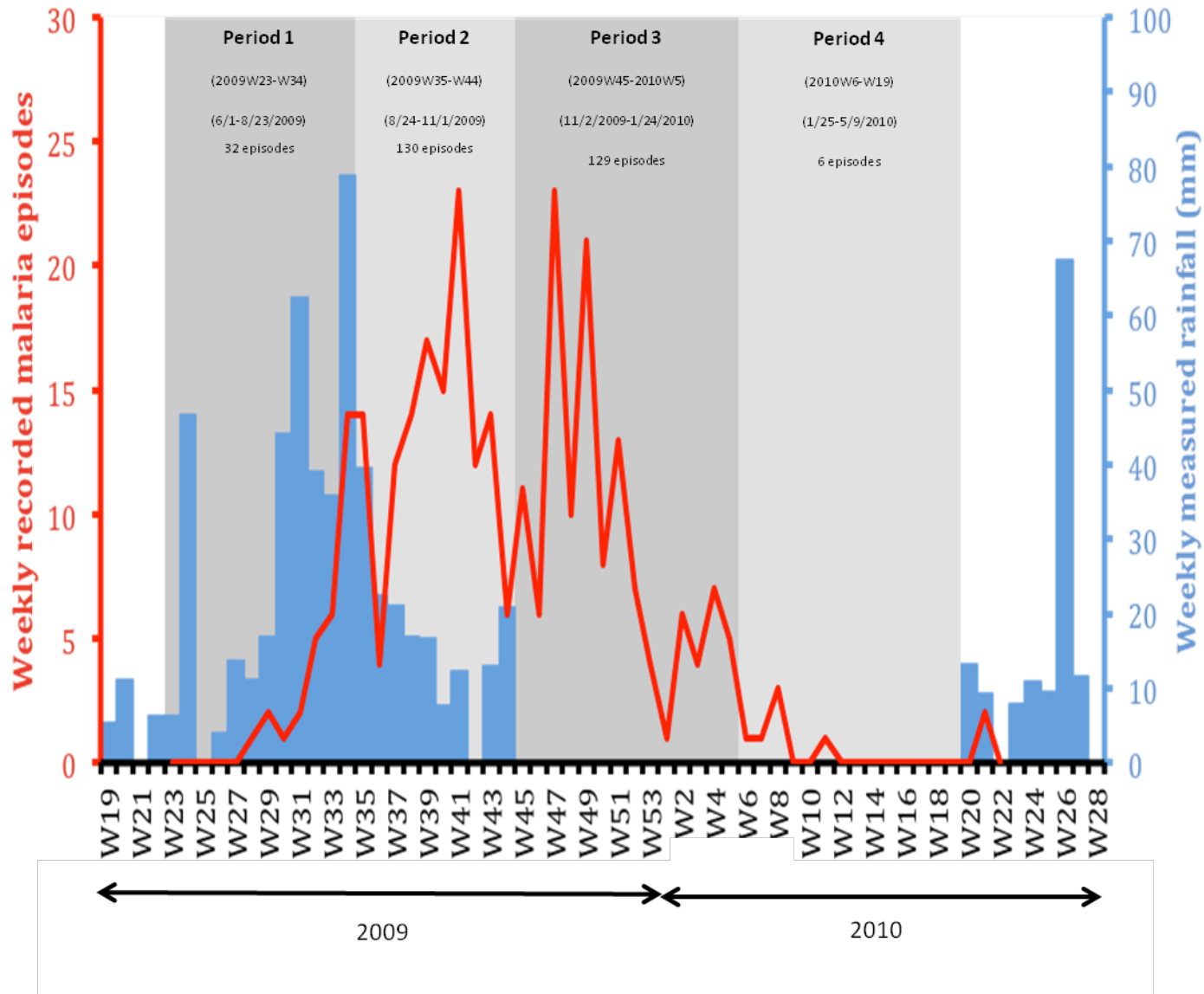


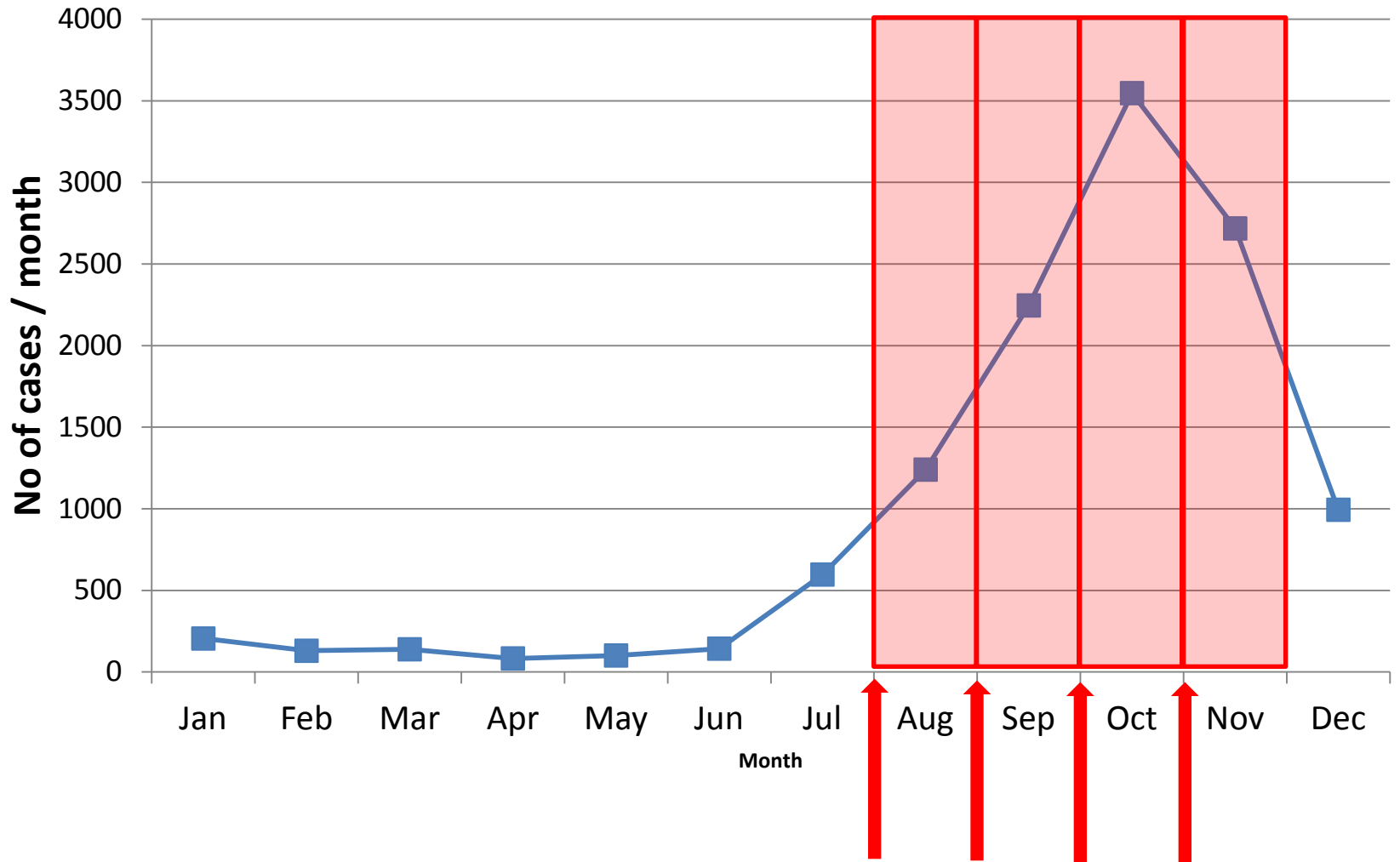
ENFANT AFRICAIN EXPOSE IN UTERO AU PLASMODIUM → IMPACT SUR SA CROISSANCE ET DEVELOPPEMENT BIOLOGIQUE ET INTELLECTUEL ?



IMPACT OF MALARIA ON SCHOOL PERFORMANCE IN MALI (*Josselin et al., Soc. Sci. & Med., 2010*)







IPTc-Combined results (Burkina & Mali, *PLoS Medecine 2011, BMGF*)

Protective Efficacy % (95%CI)

Clinical malaria	75 (72 – 77)	<0.001
Severe malaria	81 (46 – 94)	0.002
Hosp ad. for malaria	77 (21 – 94)	0.02
Malaria infection	76 (72 – 80)	<0.001
Moderate anaemia	54 (38 – 66)	<0.001



Map the areas suitable for SMC

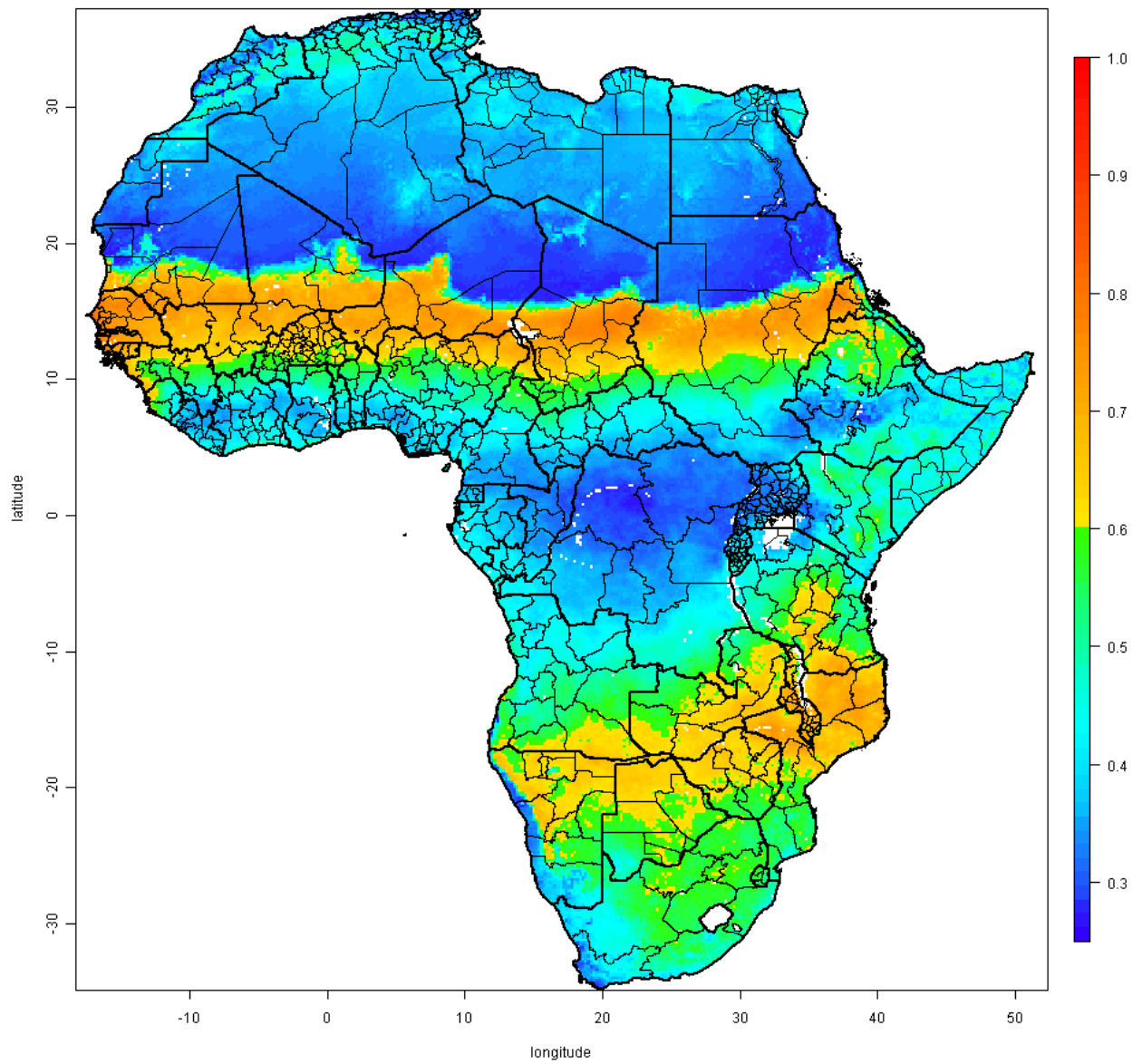
annual ~~EIR~~ rainfall
in 3 months

Yellow-red =
SMC areas

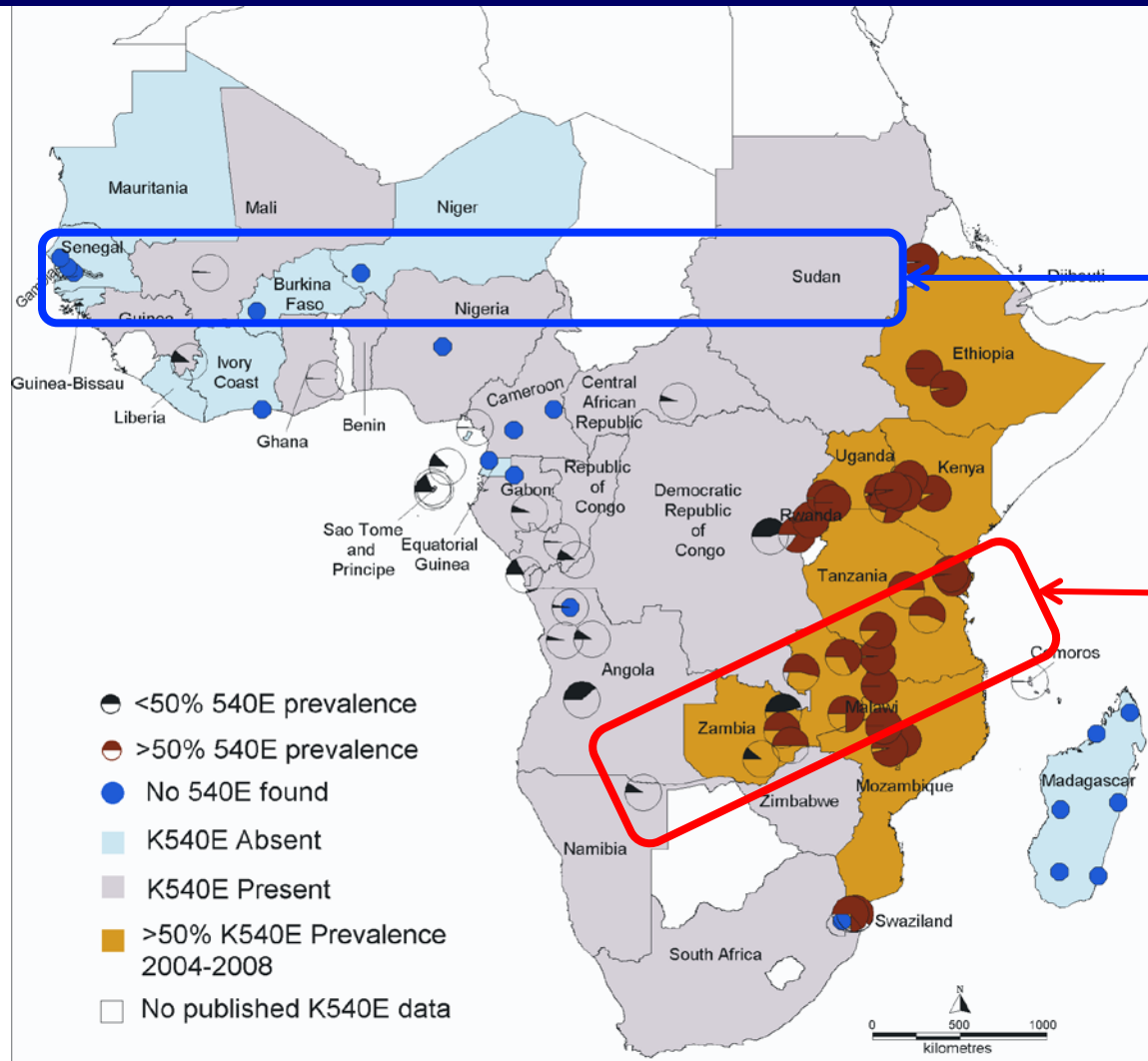
Green =
borderline

Blue =
insufficient
seasonality

EIR maps smaller
area and is more
biologically
plausible (no
transmission in
desert)



Distribution of dhps position 540 mutation in Africa



SP + AQ
suitable

Alternative
regimen
needed



Estimate the potential impact of SMC in Africa

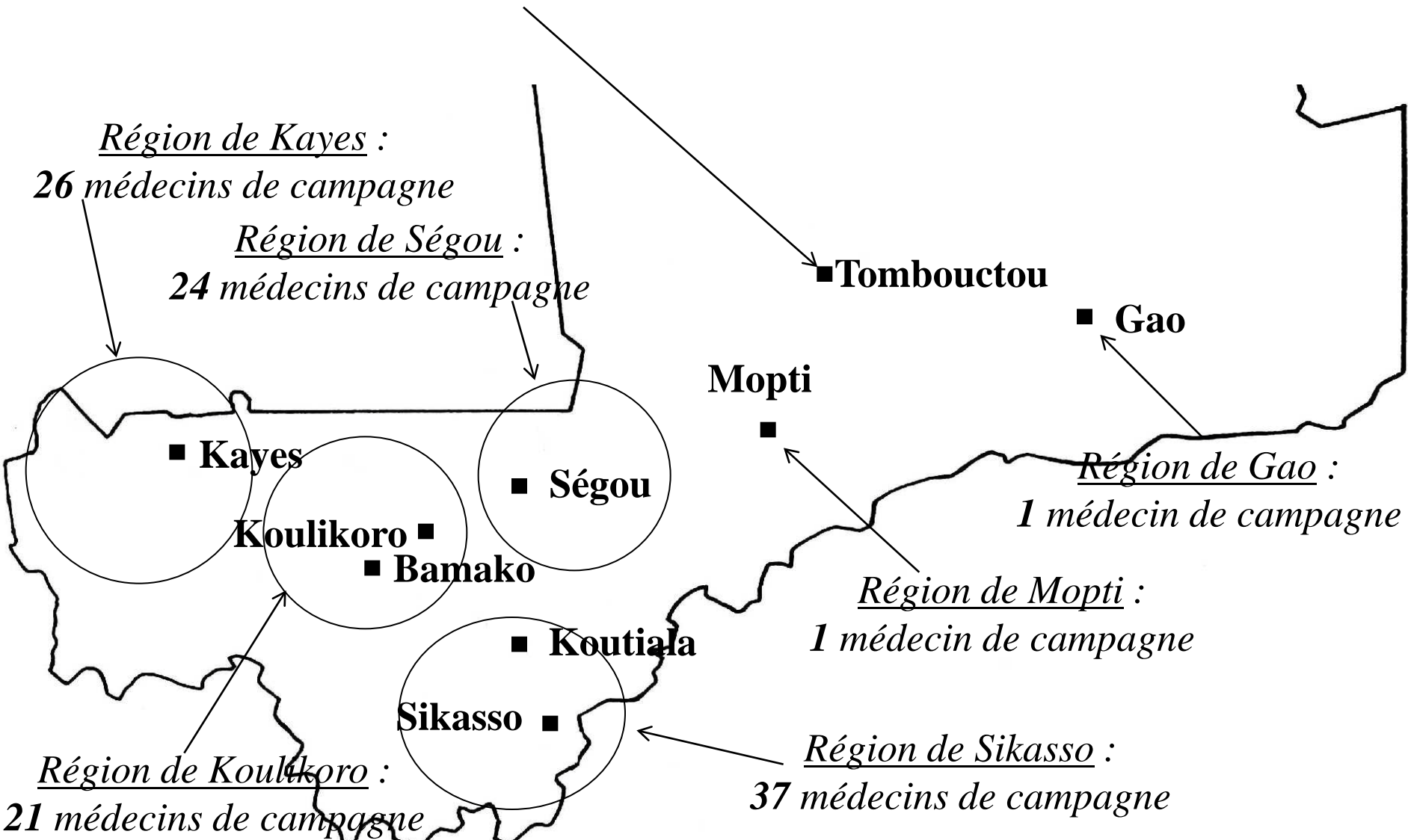
Country	Under 5 population in IPTc zone (millions)	Cases of malaria averted	Deaths averted: Method 1		Deaths Averted: Method 2
			CFR 4.5 / 1000	CFR 10 / 1000	

Assuming minimal transmission outside the SMC period

Sahel zone	23.4	9,166,355	41,249	91,664	101,541
Rest of Africa	11.9	1,387,164	6,242	13,872	41,953
Total	35.3	10,553,520	47,491	105,535	143,493

Assuming only 60% of annual transmission occurs during the SMC period

Sahel zone	23.4	5,499,813	24,749	54,998	60,924
Rest of Africa	11.9	832,299	3,745	8,323	25,172
Total	35.3	6,332,112	28,495	63,321	86,096



Région de Kayes :

26 *médecins de campagne*

Région de Ségou :

24 *médecins de campagne*

■ **Kayes**

■ **Ségou**

■ **Koulikoro**

■ **Bamako**

■ **Koutiala**

■ **Sikasso**

■ **Tombouctou**

■ **Gao**

Mopti

Région de Gao :

1 *médecin de campagne*

Région de Mopti :

1 *médecin de campagne*

Région de Koulikoro :

21 *médecins de campagne*

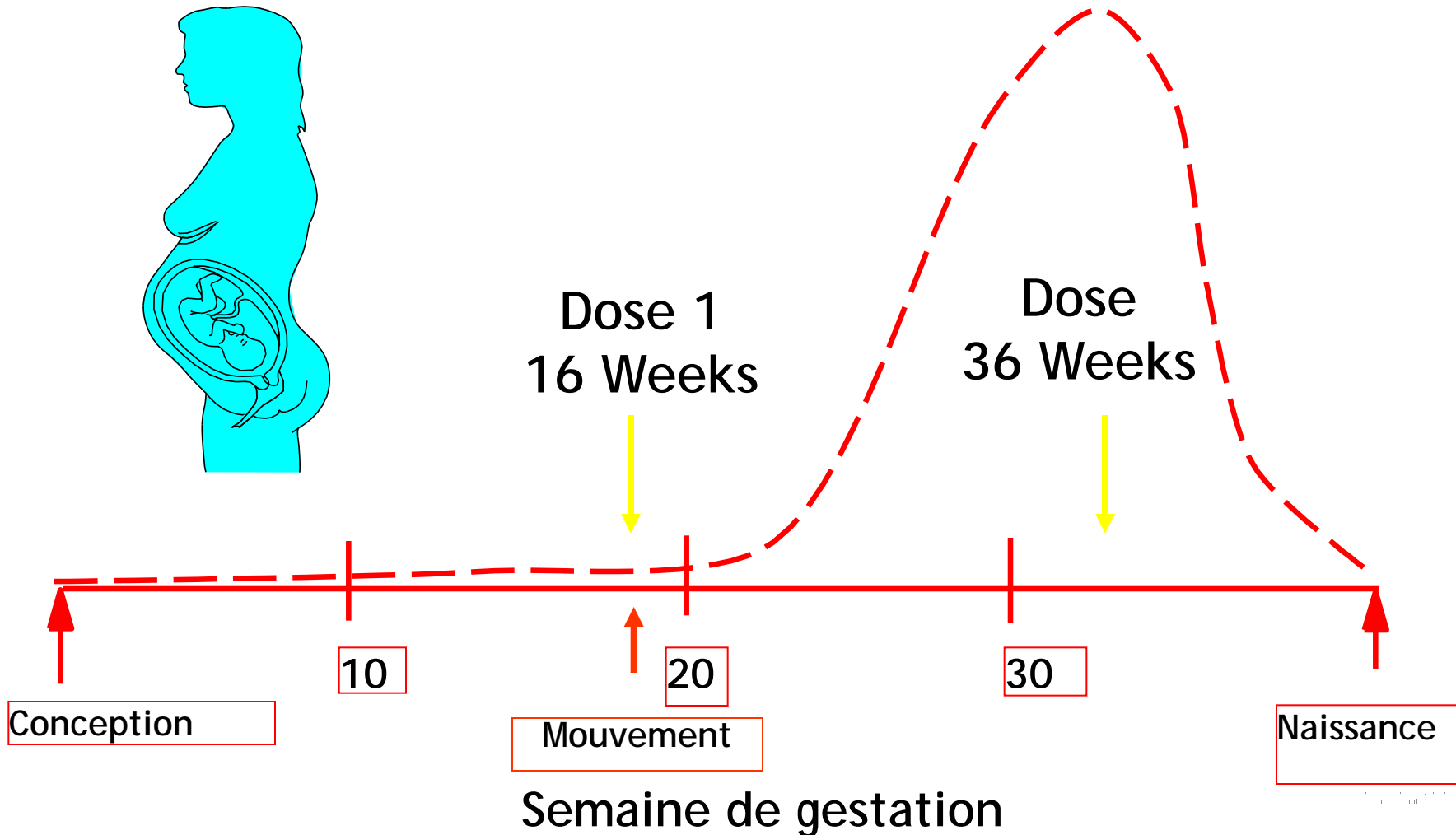
Région de Sikasso :

37 *médecins de campagne*

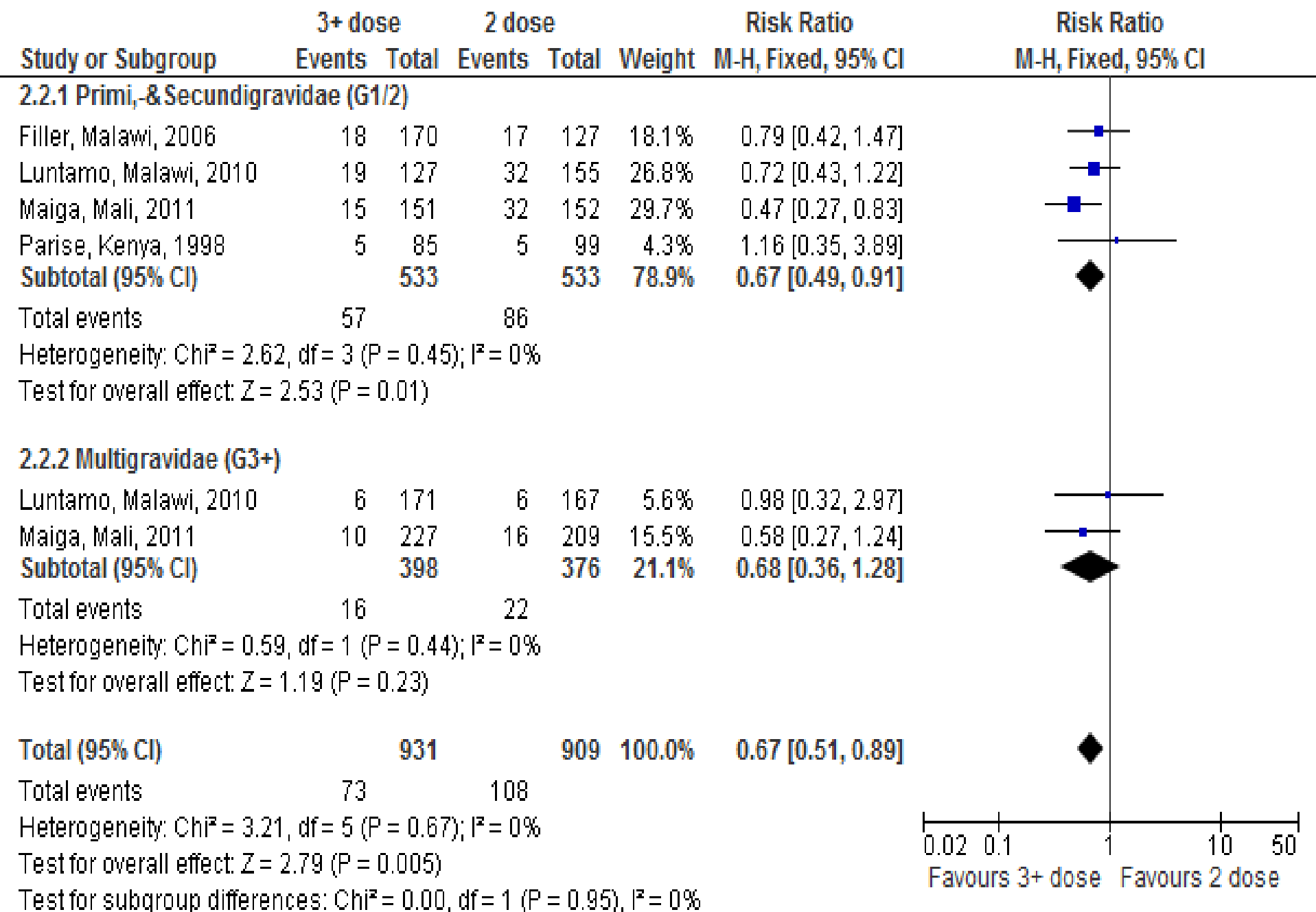




IPTp-SP-standard 2 dose regimen VS SP 3 Doses

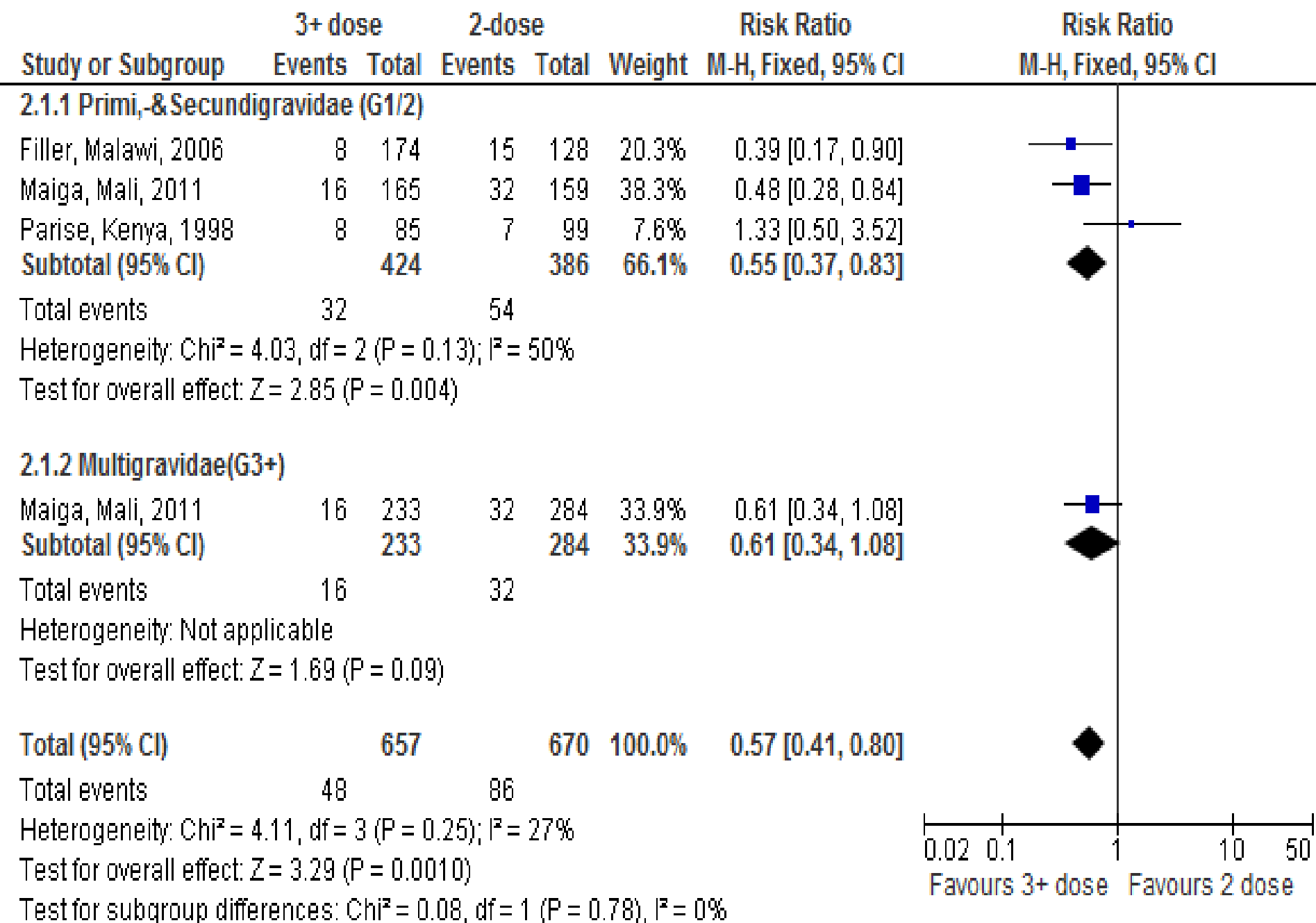


IPTp-SP TO PROTECT NEW BORN BABY AGAINST MALARIA





IPTp-SP TO PROTECT PREGNANT WOMEN AGAINST MALARIA

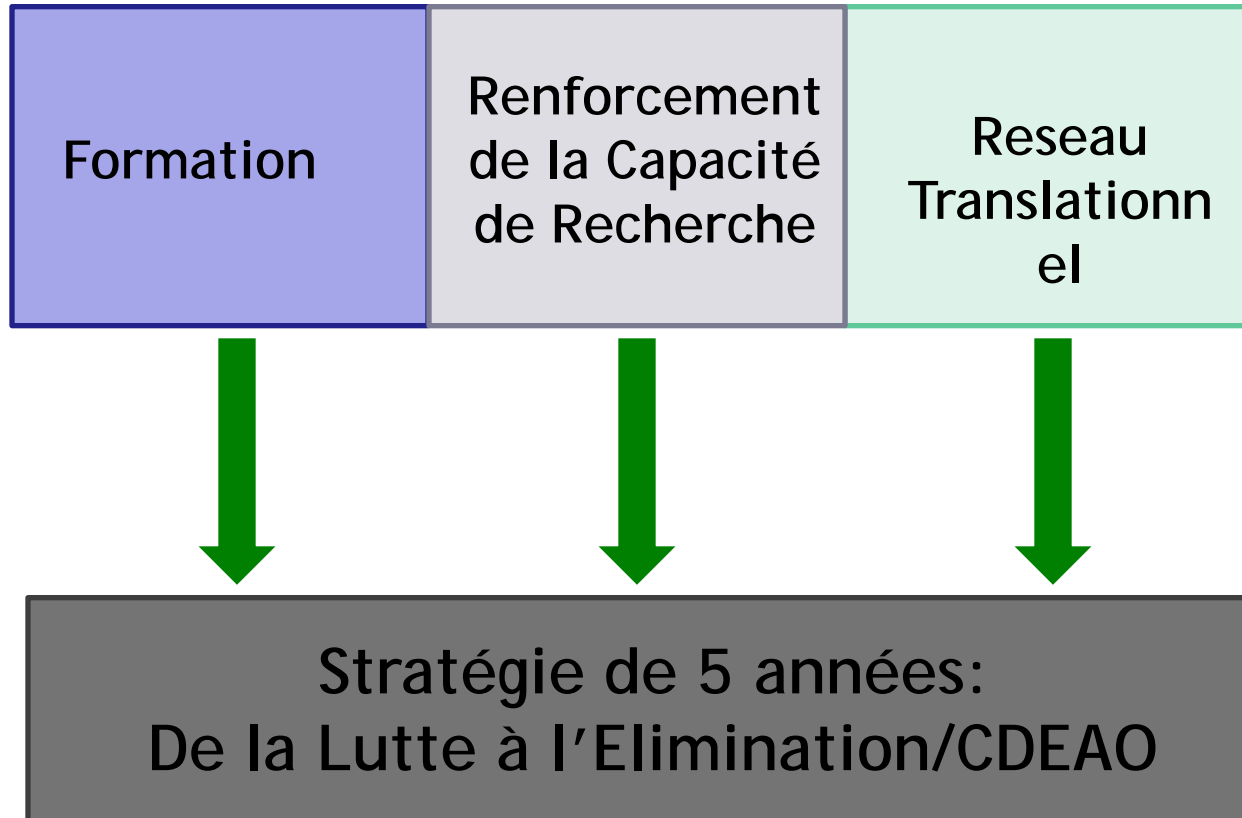




west africa
malaria
initiative

WAMI STRATEGIES

Spain, BMGF, UoBko, CRESIB, UoGhana



RENCONTRE MINISTERIELLE DE NOUACKHOTT

- 1] 6 PAYS SAHELIENS (Gambie, Mali, Mauritanie, Niger, Senegal, Tchad
- 2] Partenaires: RBM, OMS, BID, UNICEF....
- 3] Plan stratégique d'Élimination du paludisme dans le sahel : 3 ans



SANTÉ SUD



A JOURNEY WITH A HAPPY DOCTOR AND KID IN THE BUSH

