



"If you think
you are
too small
to make a
difference,
try spending
the night
with
a mosquito"
- African Proverb



(post-)Travel Medicine Trick-or-Treat ?

Fortbildung Tropen- und Reisemedizin

Formation continue de Médecine Tropicale et de Médecine des Voyages

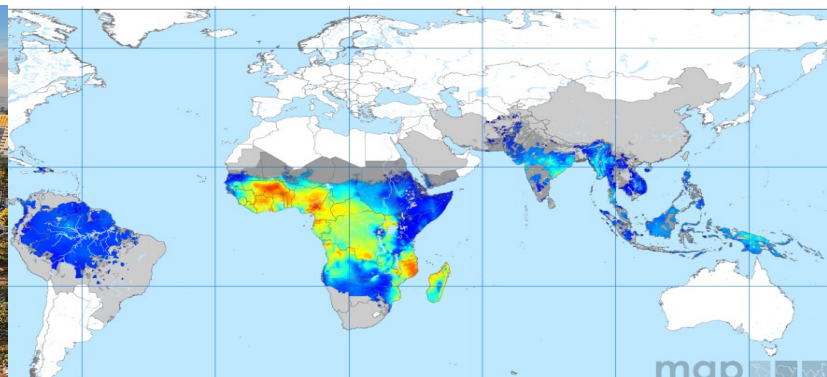
06.02.2025, Bern

Dr G. Eperon - Division of Tropical and Humanitarian Medicine - gilles.eperon@hug.ch

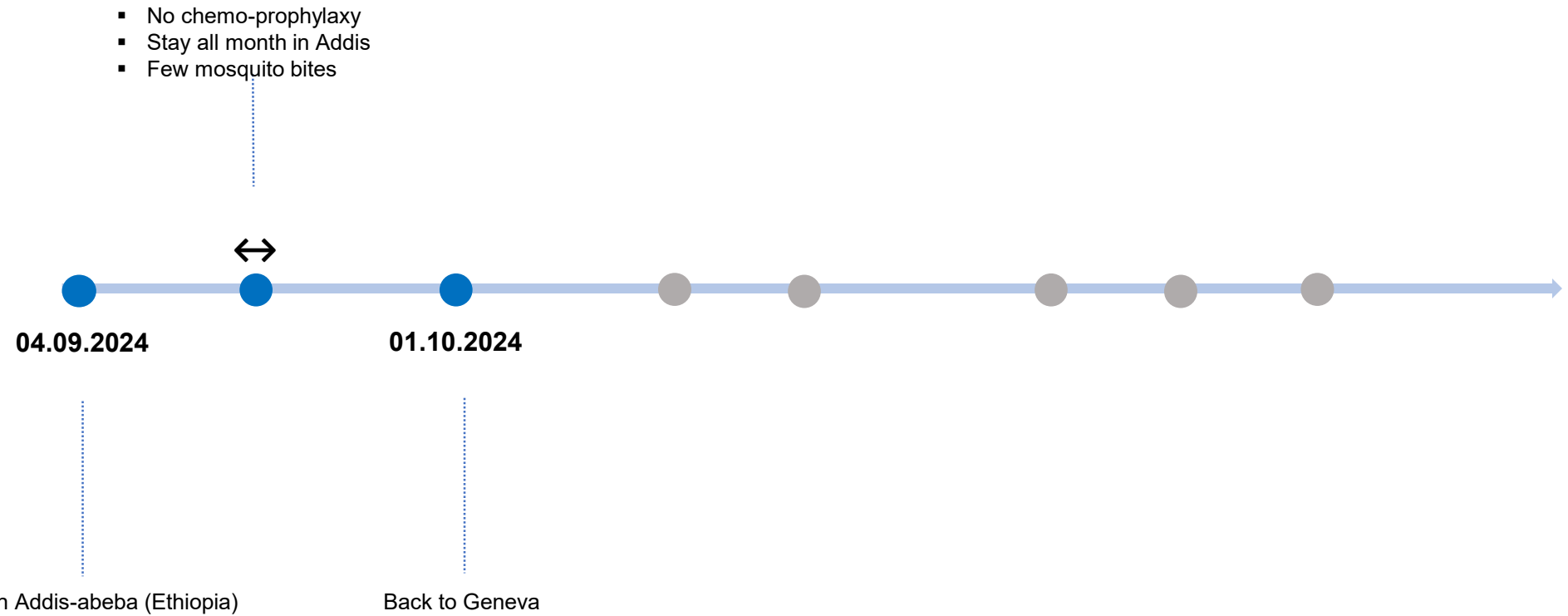


Schweizerische Fachgesellschaft für Tropen- und Reisemedizin FMH
Société Suisse de Médecine Tropicale et de Médecine des Voyages FMH
Società Svizzera di Medicina Tropicale e di Viaggio FMH
Swiss Society for Tropical and Travel Medicine FMH

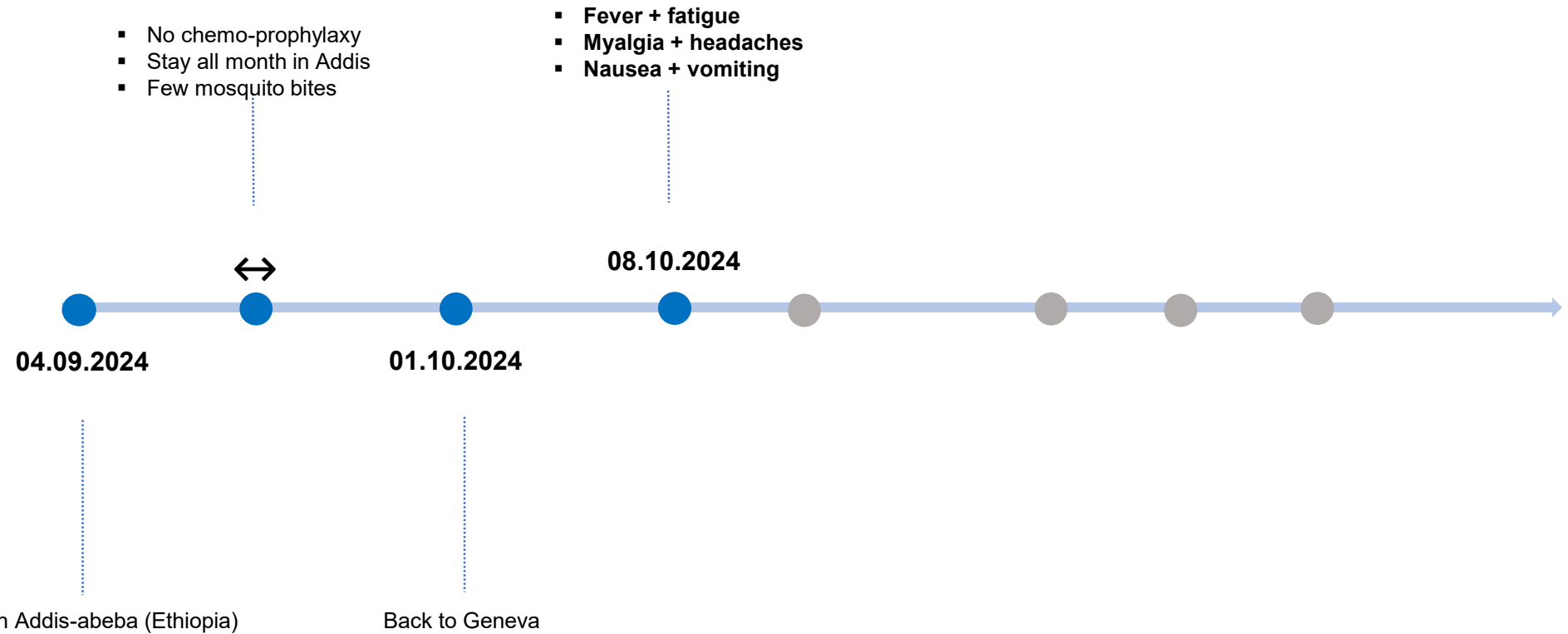
HUG Hôpitaux
Universitaires
Genève



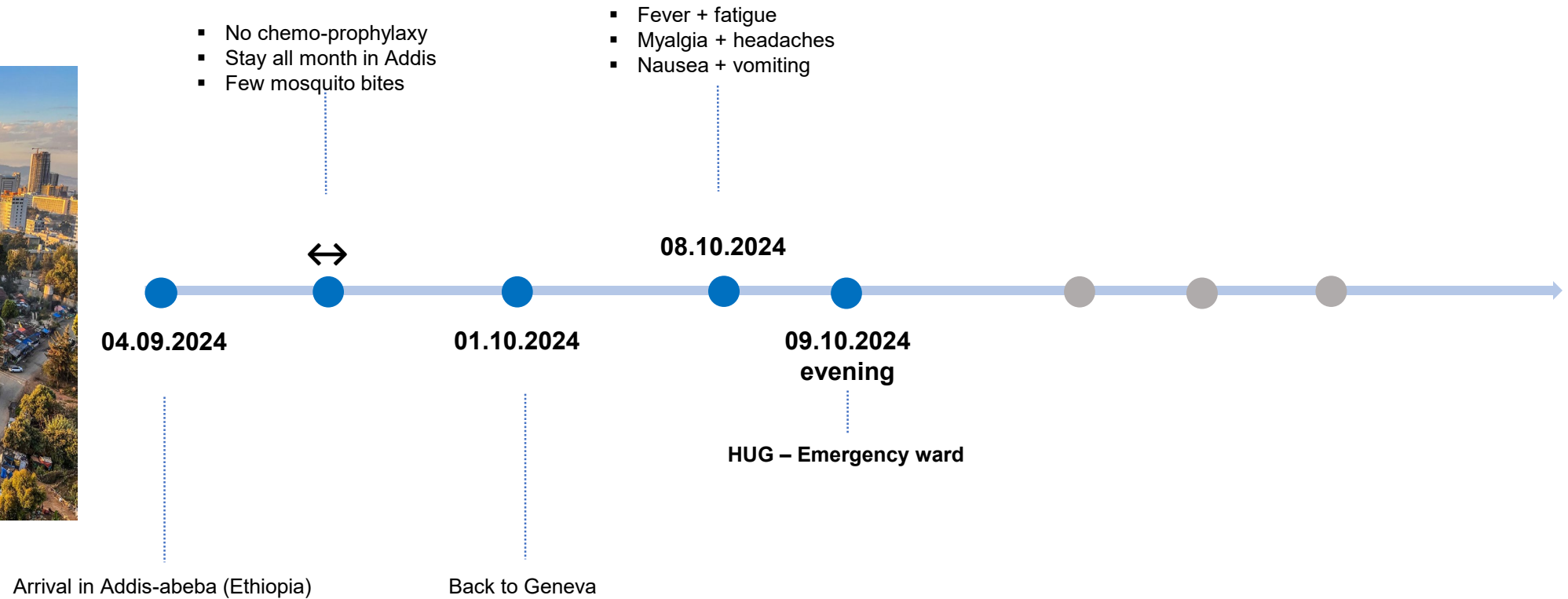
GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)



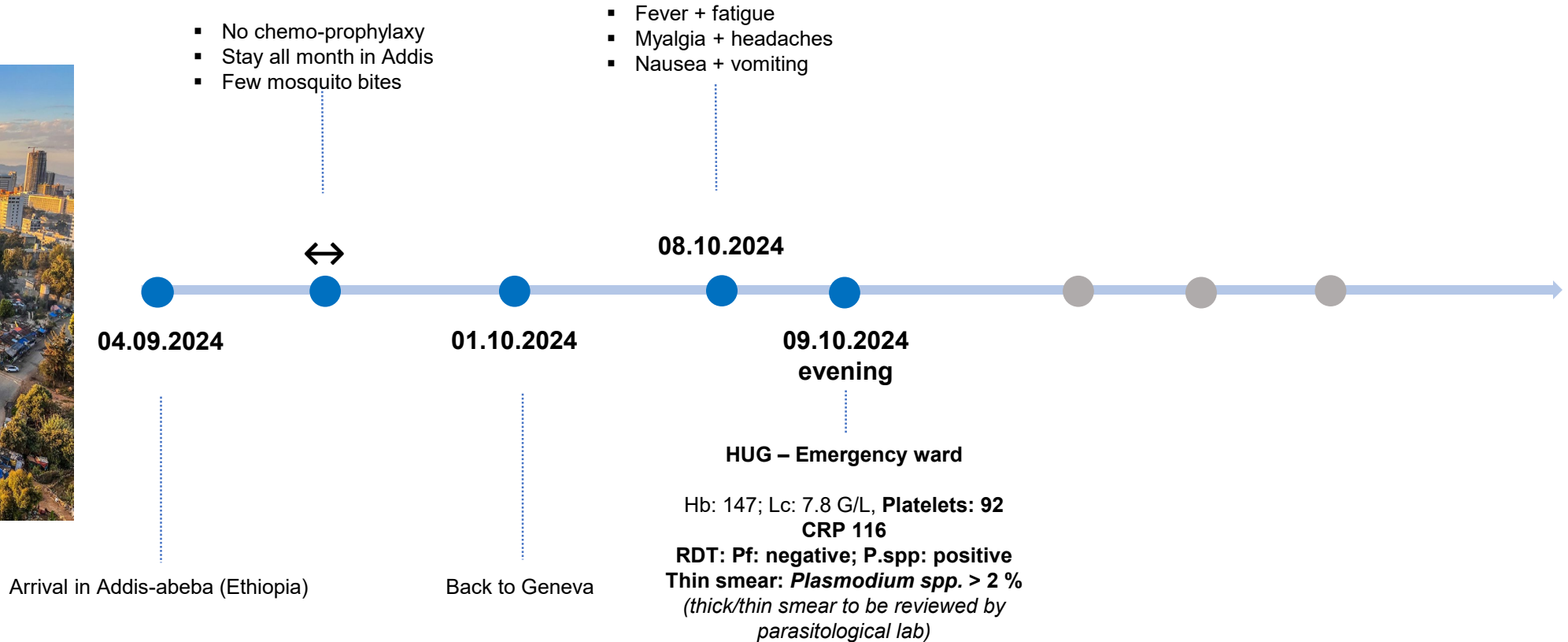
GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)



GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)



GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)

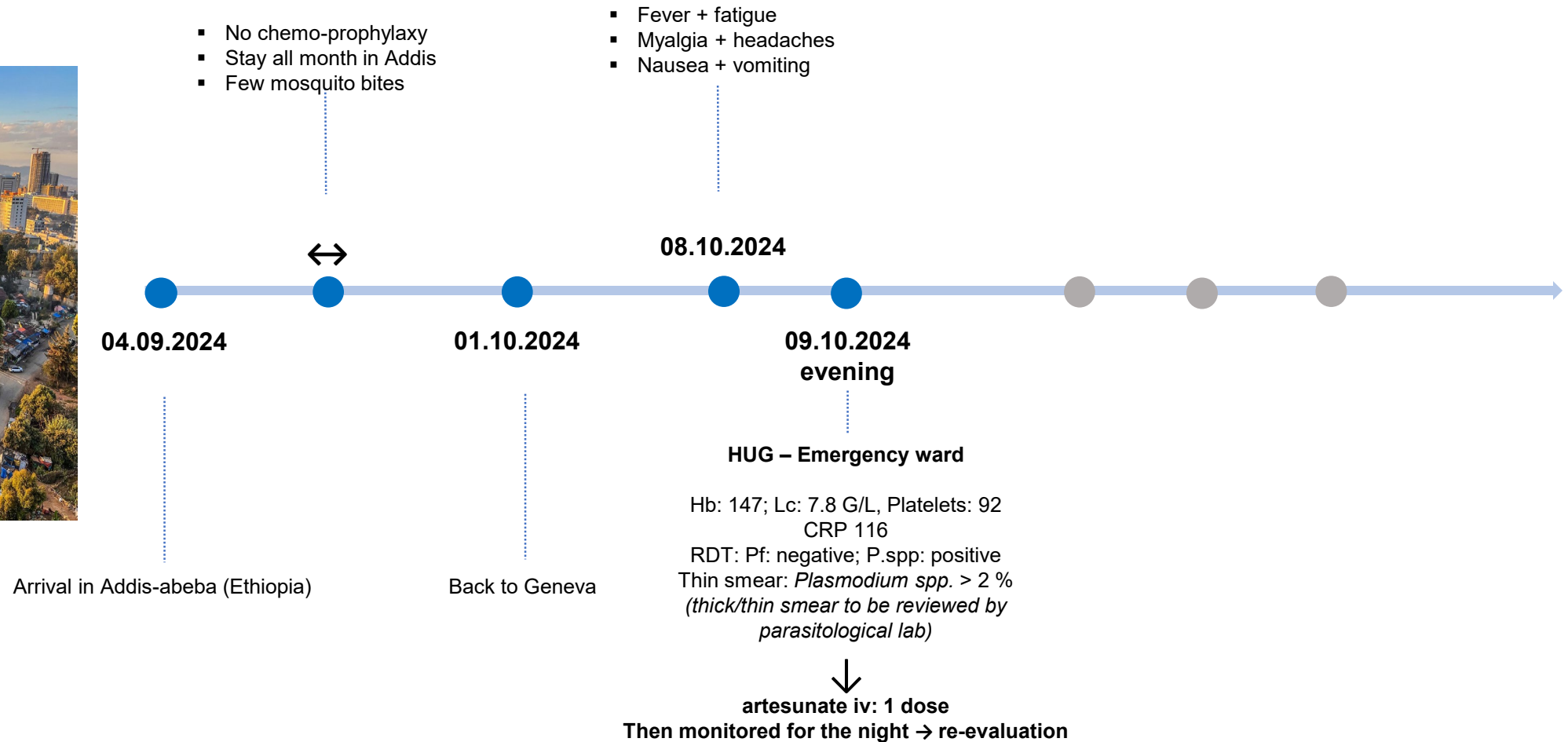


GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)

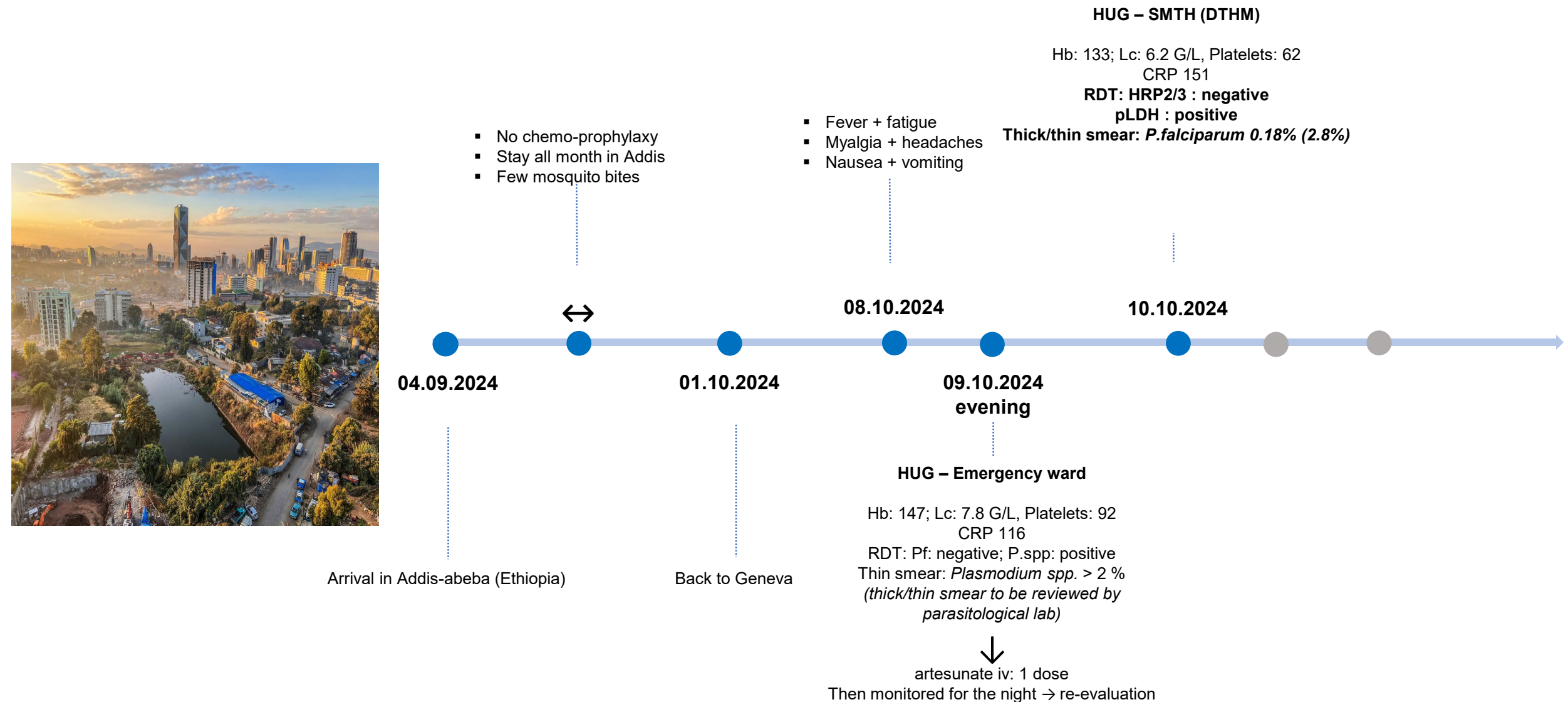
Quizz

- How do you interpret this result (RDT: Pf: negative; P.spp: positive; Thin smear: P. spp. > 2 %) ?
 - a) mixed infection with several *Plasmodium spp.*
 - b) *P. falciparum* malaria
 - c) *P. non-falciparum* malaria
 - d) Babesiosis
 - e) COVID-19

GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)

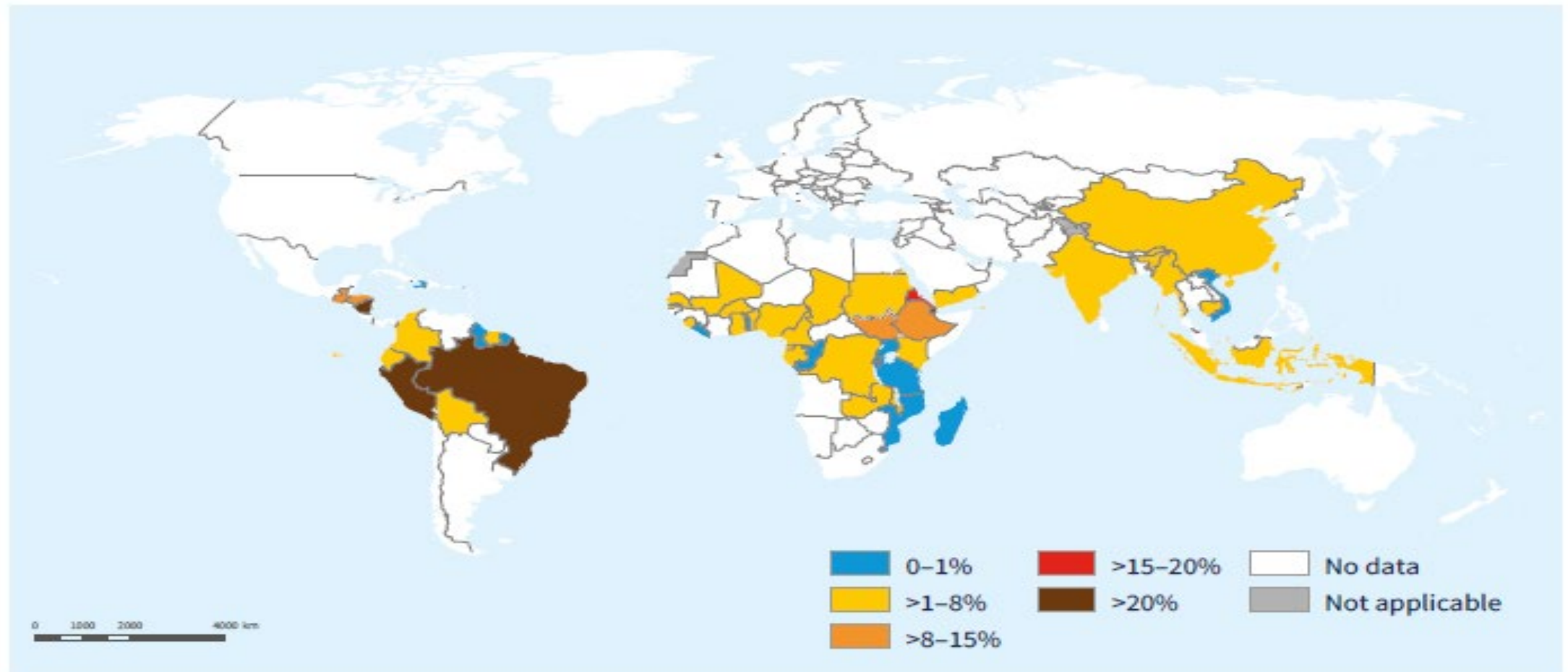


GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)

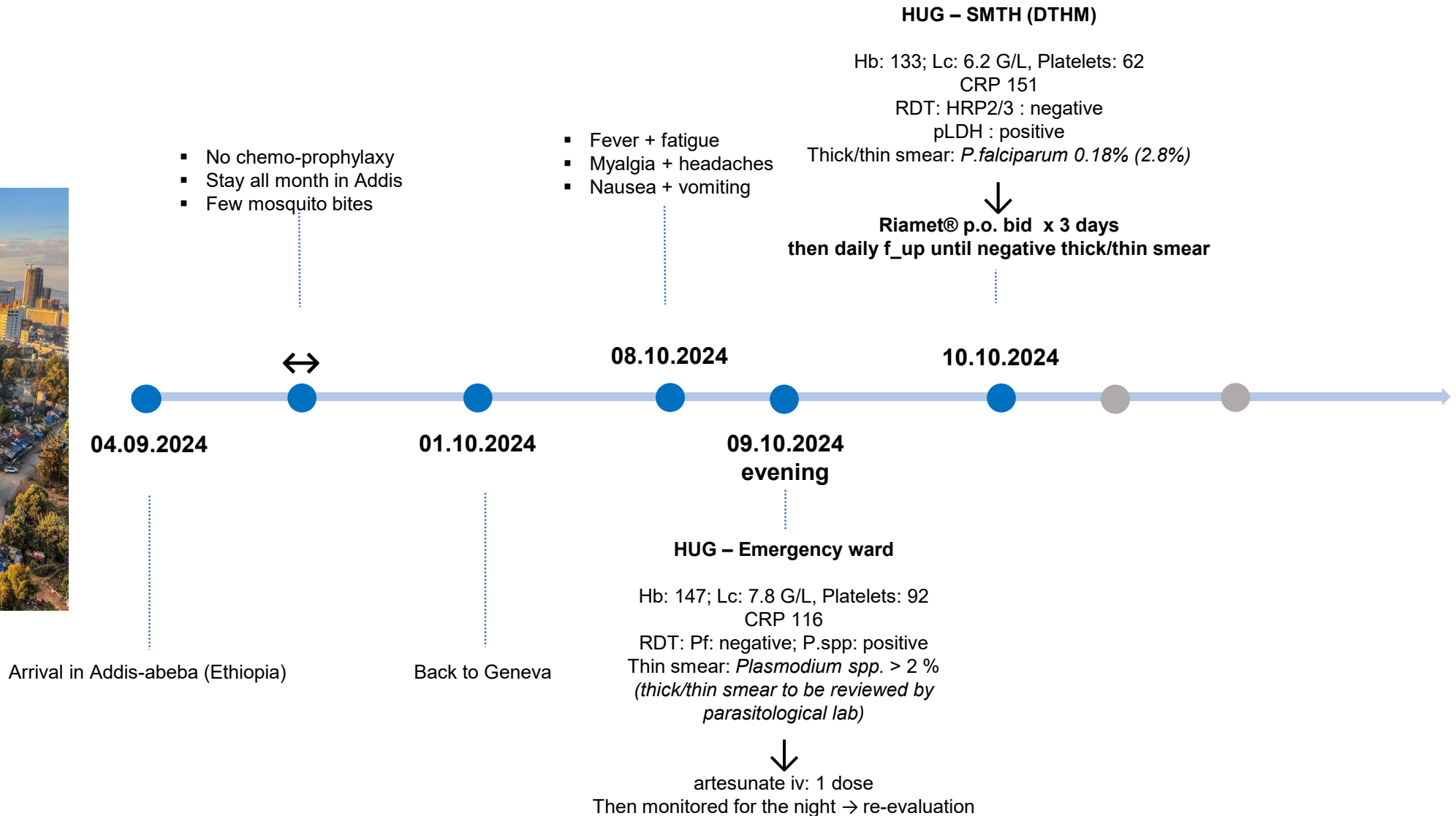


GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)

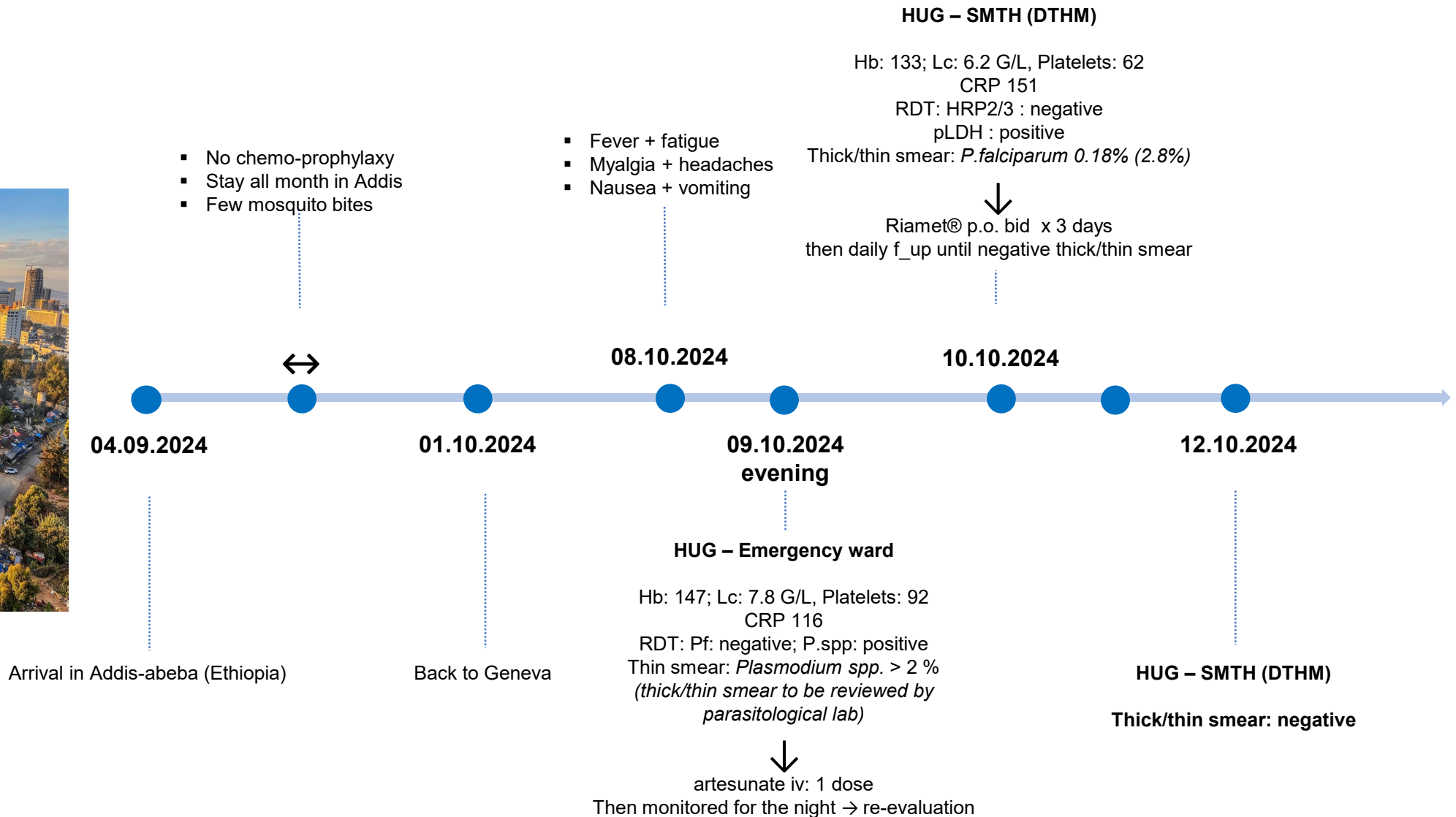
Fig. 8.1. Estimated prevalence of *pfhrp2* gene deletions, 1996–2023 Source: Review of published literature included in the Malaria Threats Map (69).



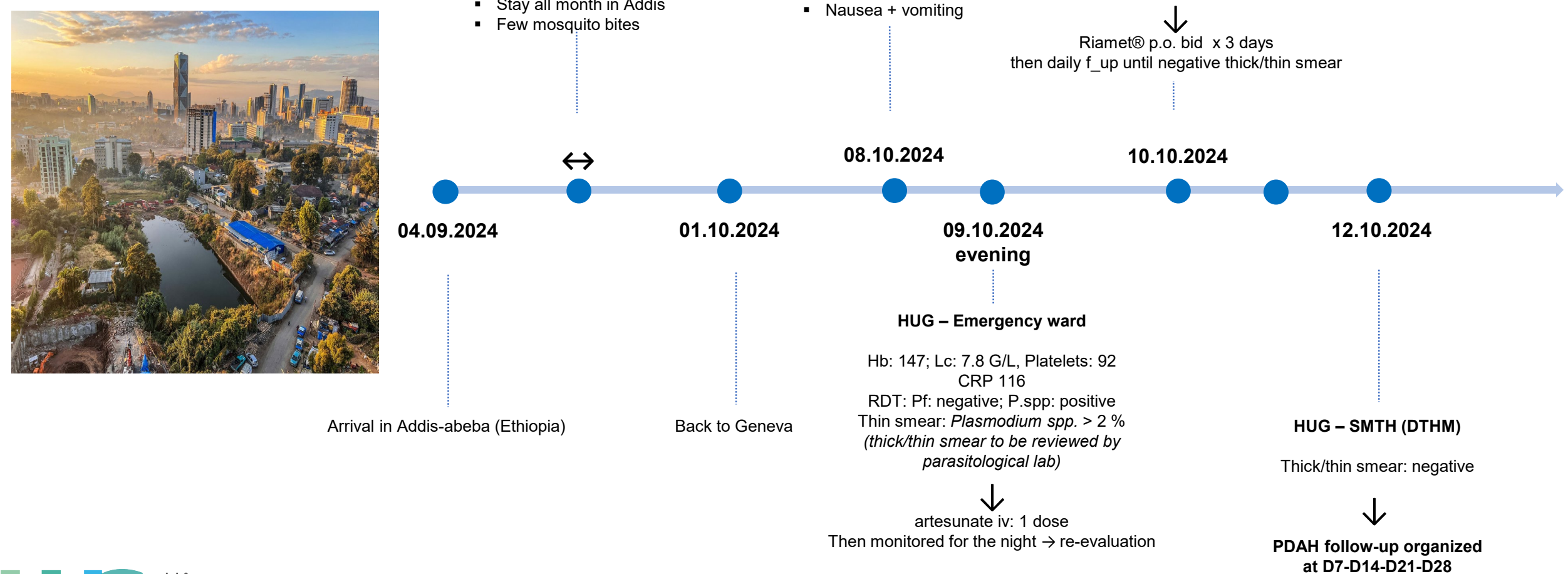
GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)



GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)



GVA-1 : male, 28 y.o. of Eritrean origin, in Switzerland since 2014, history of several malaria (last one in 2018)



GVA-2 :

male, 39 y.o. french, in usual good health



GVA-2 :

male, 39 y.o. french, in usual good health

- No chemoprophylaxy
- Multiples mosquito bites



17.08.2023

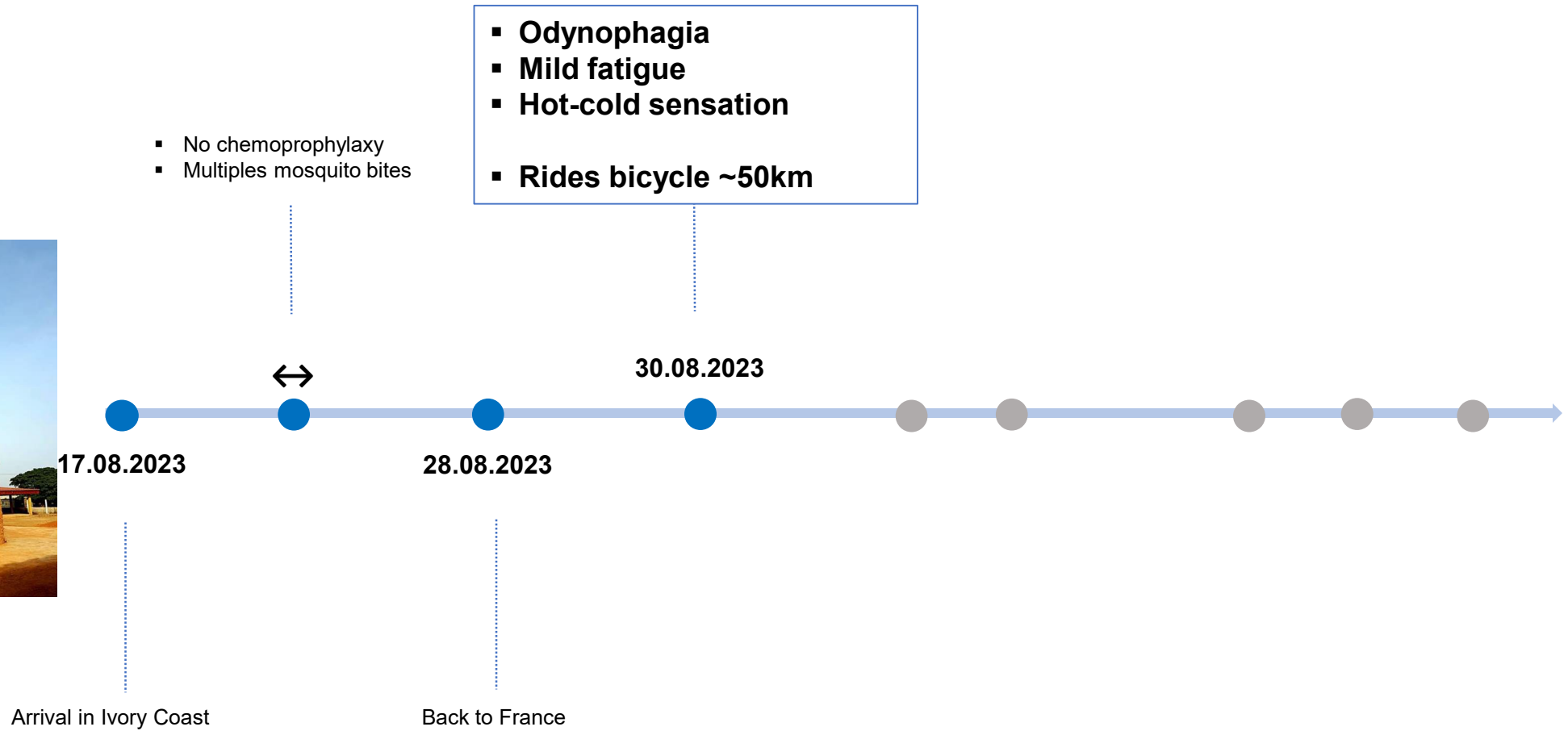
28.08.2023

Arrival in Ivory Coast

Back to France

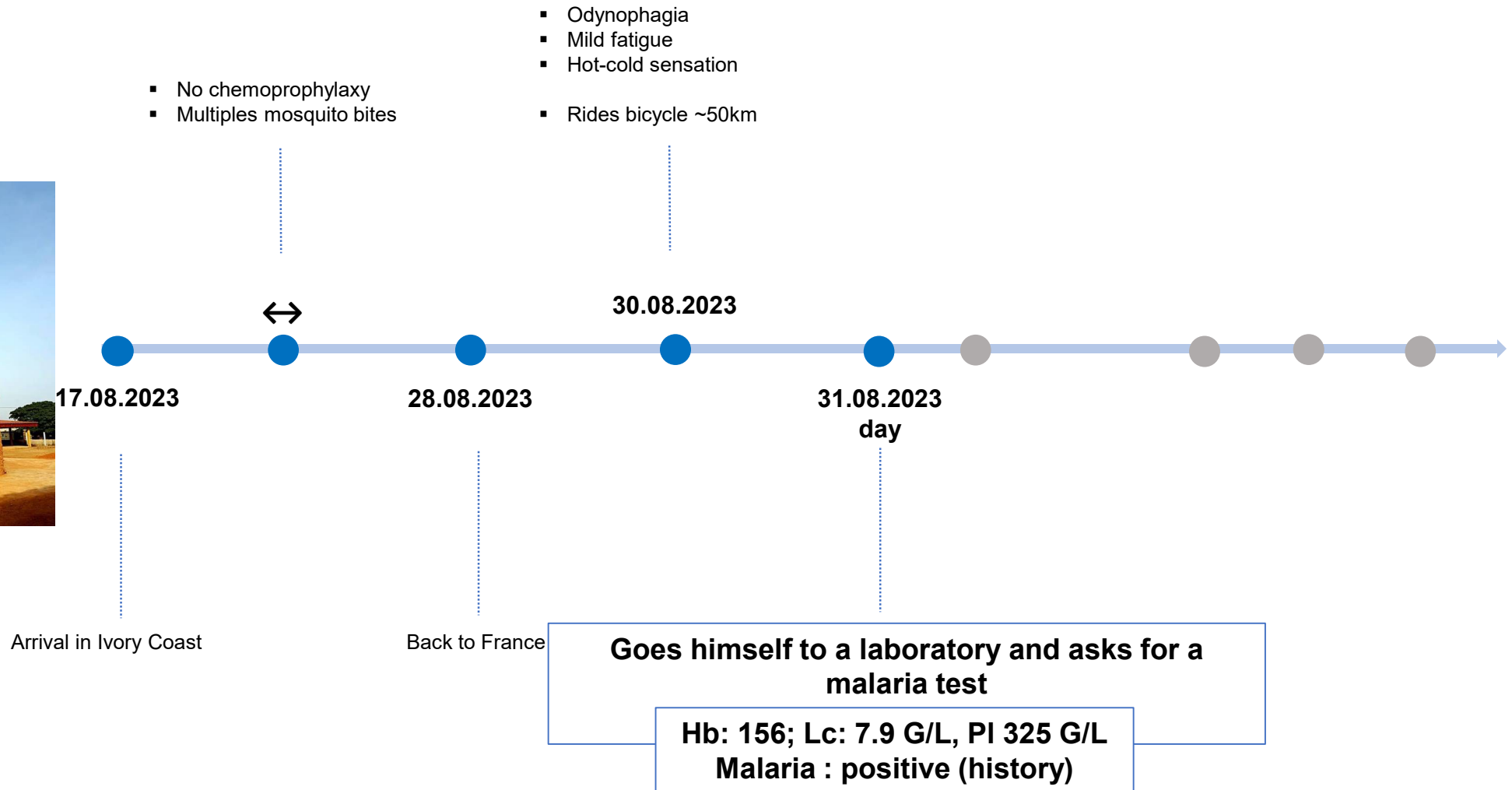
GVA-2 :

male, 39 y.o. french, in usual good health



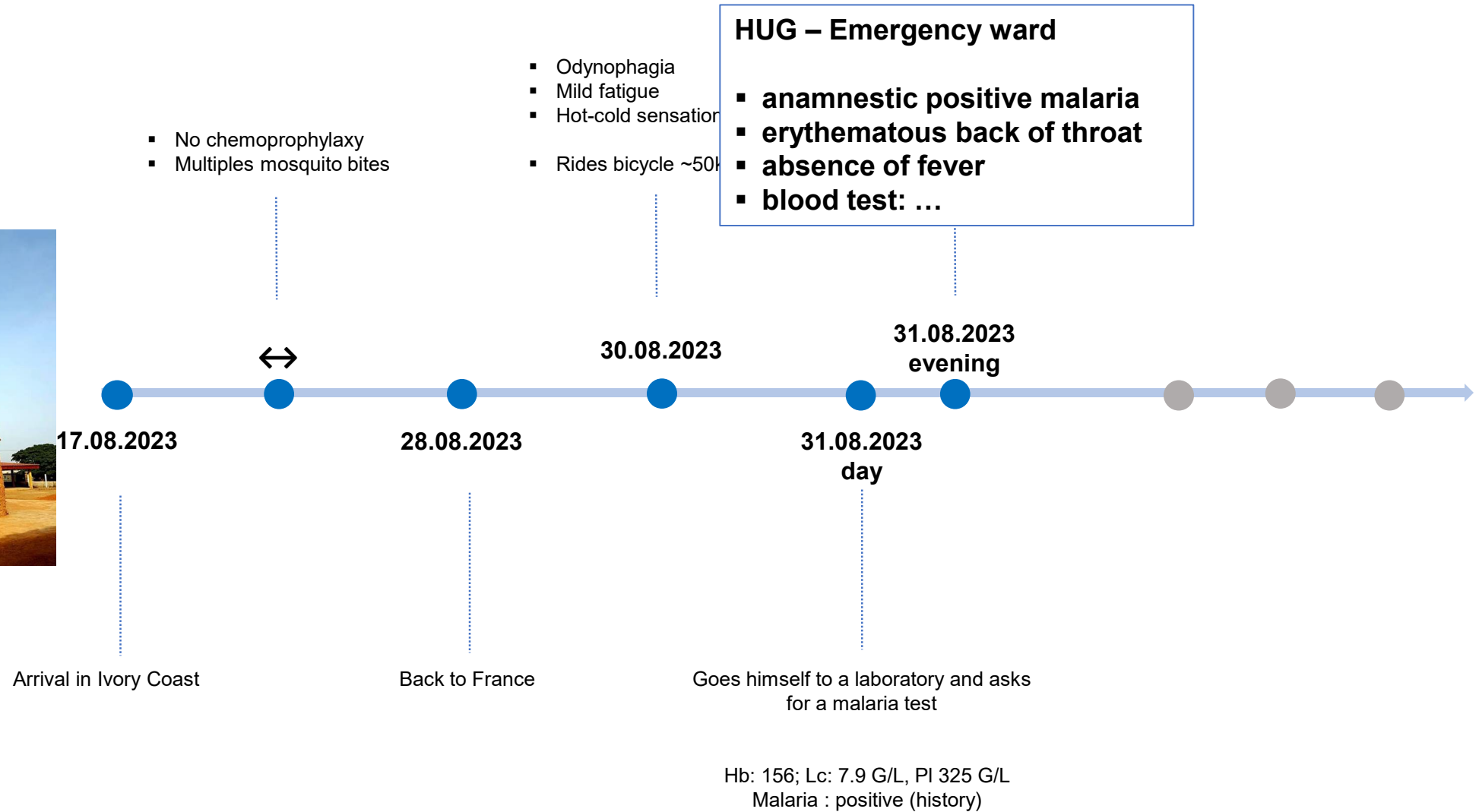
GVA-2 :

male, 39 y.o. french, in usual good health



GVA-2 :

male, 39 y.o. french, in usual good health



GVA-2 :

male, 39 y.o. french, in usual good health

Analyse	Unité	Ref./Seuil	42435777 UUA-US 31/08/23 22:30 Sang veineux
Erythrocytes			
érythrocytes	T/l	4.40 - 6.00	5.02
hémoglobine	g/l	140 - 180	156
leucocytes	G/l	4.0 - 11.0	7.8
Répartition leucocytaire			
neutrophiles	%	33.0 - 80.0	66.2 ^(a)
neutrophiles segmentés	%	33.0 - 75.0	
neutrophiles non segmnt	%	0.0 - 5.0	
éosinophiles	%	0.0 - 5.0	1.0
basophiles	%	0.0 - 2.0	0.6
monocytes	%	0.0 - 9.0	10.1
lymphocytes	%	15.0 - 60.0	22.1
Thrombocytes			
thrombocytes	G/l	150 - 350	291

Analyse	Unité	Ref./Seuil	42435777 UUA-US 31/08/23 22:30 Sang veineux
Chi			
glucose	mmol/l	4.1 - 6.0	5.2
protéine C-réactive	mg/l	0.00 - 10.0	0.95 ^(a)
sodium	mmol/l	136 - 144	135
potassium	mmol/l	3.6 - 4.6	3.9
osmolalité calculée	mOsm/kg	280 - 295	277
urée	mmol/l	3.2 - 7.5	2.8
créatinine	μmol/l	62 - 106	77
(na) _e GFR (CDK-EPI 2021)	ml/min/1.73m ²	> 60	113
ASAT	U/l	14 - 50	14
ALAT	U/l	12 - 50	22
phosphatase alcaline	U/l	25 - 102	57
gamma glutamyltranspept.	U/l	9 - 40	20
bilirubine totale	μmol/l	7 - 25	4
bilirubine conjuguée	μmol/l	0.5 - 9.5	(b)

Malaria,frottis,goutte épaisse	
Goutte épaisse	NEGATIVE
frottis	NEGATIF
Malaria, antigènes; test rapide	
malaria, antigènes	NEGATIF

GVA-2 :

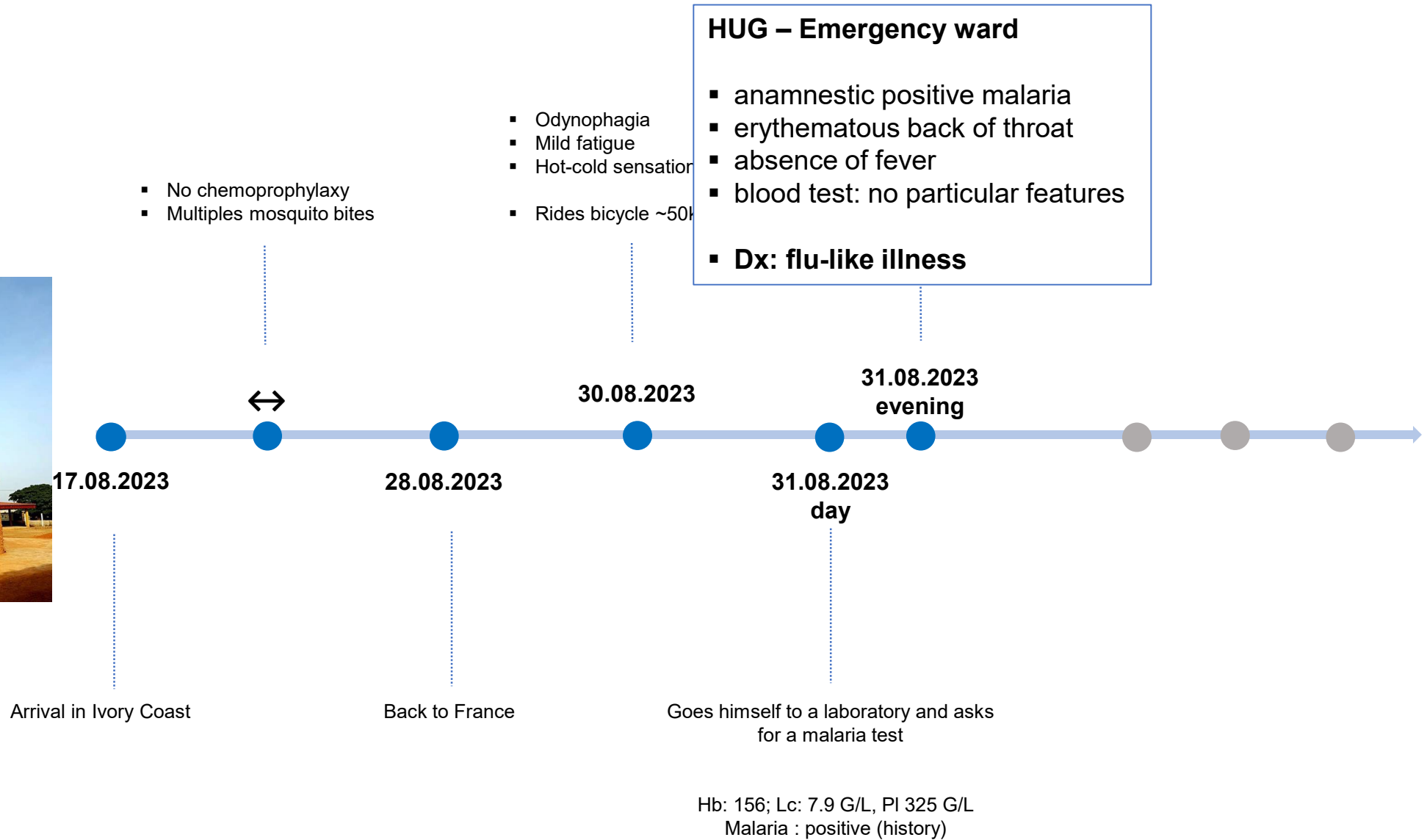
male, 39 y.o. french, in usual good health

Quizz

- What diagnosis do you suggest?
 - a) influenza-like illness (possibly COVID-19)
 - b) strep throat
 - c) *P. falciparum* malaria
 - d) *P. non-falciparum* malaria
 - e) Dengue fever

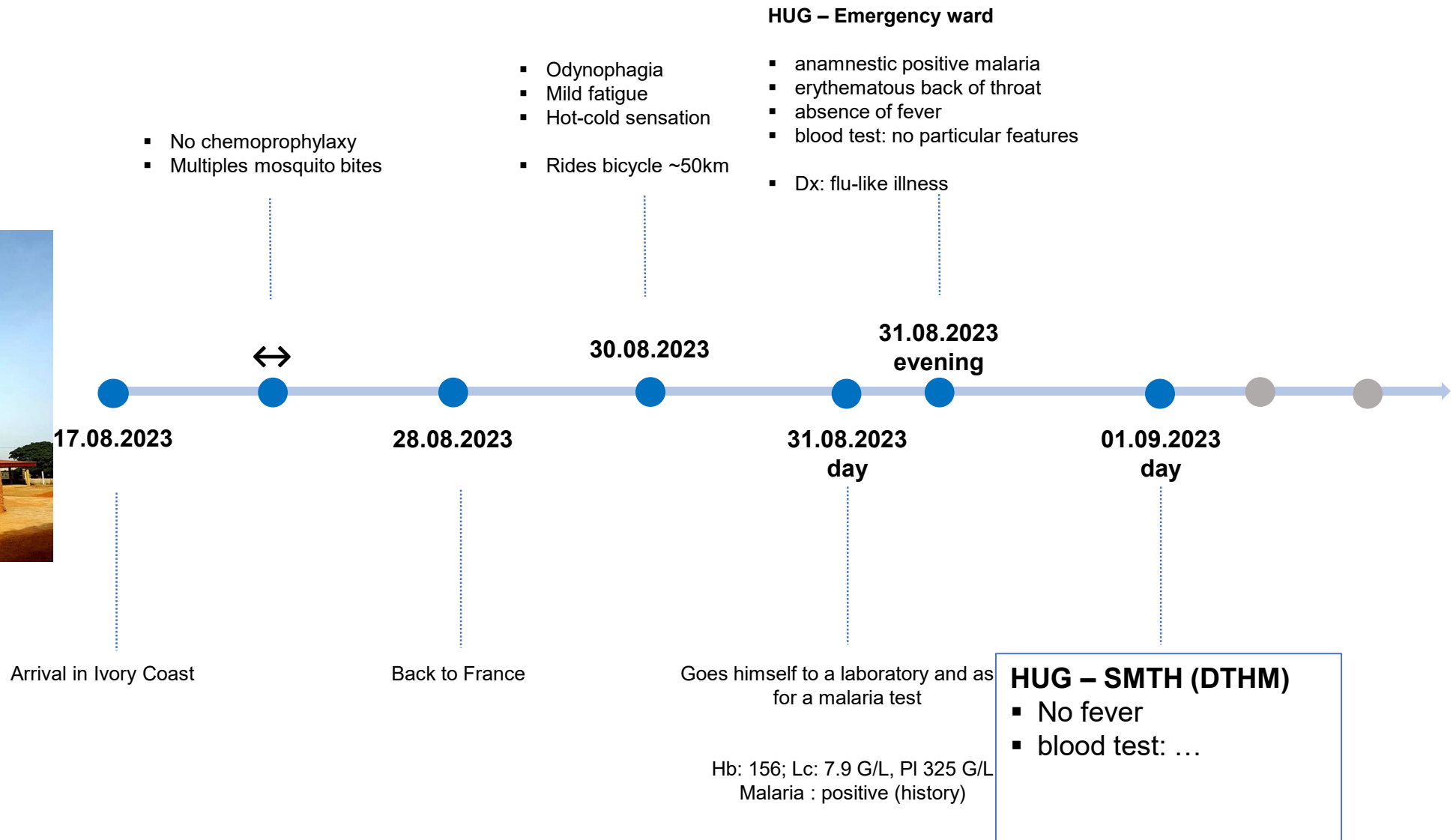
GVA-2 :

male, 39 y.o. french, in usual good health



GVA-2 :

male, 39 y.o. french, in usual good health



GVA-2 :

male, 39 y.o. french, in usual good health

Analyse	Unité	Ref./Seuil	42435777 UUA-US 31/08/23 22:30 Sang veineux	42435775 UUA-US 31/08/23 22:30 Sang veineux	42441391 PMTROP 01/09/23 13:00 Sang veineux	\$
Erythrocytes						
érythrocytes	T/l	4.40 - 6.00	5.88		5.88	
hémoglobine	g/l	140 - 180	156		158	
hématocrite	%	40.0 - 52.0	45.8		46.3	
MCV	fl	82.0 - 98.0	91.2		91.5	
MCH	pg	26.0 - 34.0	31.1		31.2	
MCHC	g/l	320 - 360	341		341	
Leucocytes						
leucocytes	G/l	4.0 - 11.0	7.8		6.8	
Répartition leucocytaire						
neutrophiles	%	33.0 - 80.0	66.2 ^(a)		61.6 ^(a)	
neutrophiles segmentés	%	33.0 - 75.0				
neutrophiles non segmnt	%	0.0 - 5.0				
éosinophiles	%	0.0 - 5.0	1.0		2.1	
basophiles	%	0.0 - 2.0	0.6		0.7	
monocytes	%	0.0 - 9.0	10.1		11.2	
lymphocytes	%	15.0 - 60.0	22.1		24.4	
cellules réparties						
neutrophiles-nb.abs	G/l	1.50 - 8.00	5.16		4.19	
neutro segmentes nb.abs	G/l	1.50 - 7.50				
neutro non seg.-nb.abs	G/l	0.00 - 0.50				
éosinophiles-nb.abs	G/l	0.00 - 0.40	0.08		0.14	
basophiles-nb.abs	G/l	0.00 - 0.20	0.05		0.05	
monocytes-nb.abs	G/l	0.00 - 0.80	0.79		0.76	
lymphocytes-nb.abs	G/l	1.00 - 4.50	1.72		1.66	
Thrombocytes						
thrombocytes	G/l	150 - 350	291		283	

Analyse	Unité	Ref./Seuil	42435777 UUA-US 31/08/23 22:30 Sang veineux	42441391 PMTROP 01/09/23 13:00 Sang veineux	\$
Chimie					
glucose	mmol/l	4.1 - 6.0	5.2		
protéine C-réactive	mg/l	0.00 - 10.00	0.95 ^(a)	1.89 ^(a)	

Analyse	Unité	Ref./Seuil	42441391 PMTROP 01/09/23 13:00 Sang veineux	\$
Malaria, antigènes; test rapide				
malaria, antigènes			POSITIF	
Plasmodium falciparum, antigènes			PRESENT	
Malaria,frottis,goutte épaisse				
Goutte épaisse			NEGATIVE	
frottis			NEGATIF	

GVA-2 :

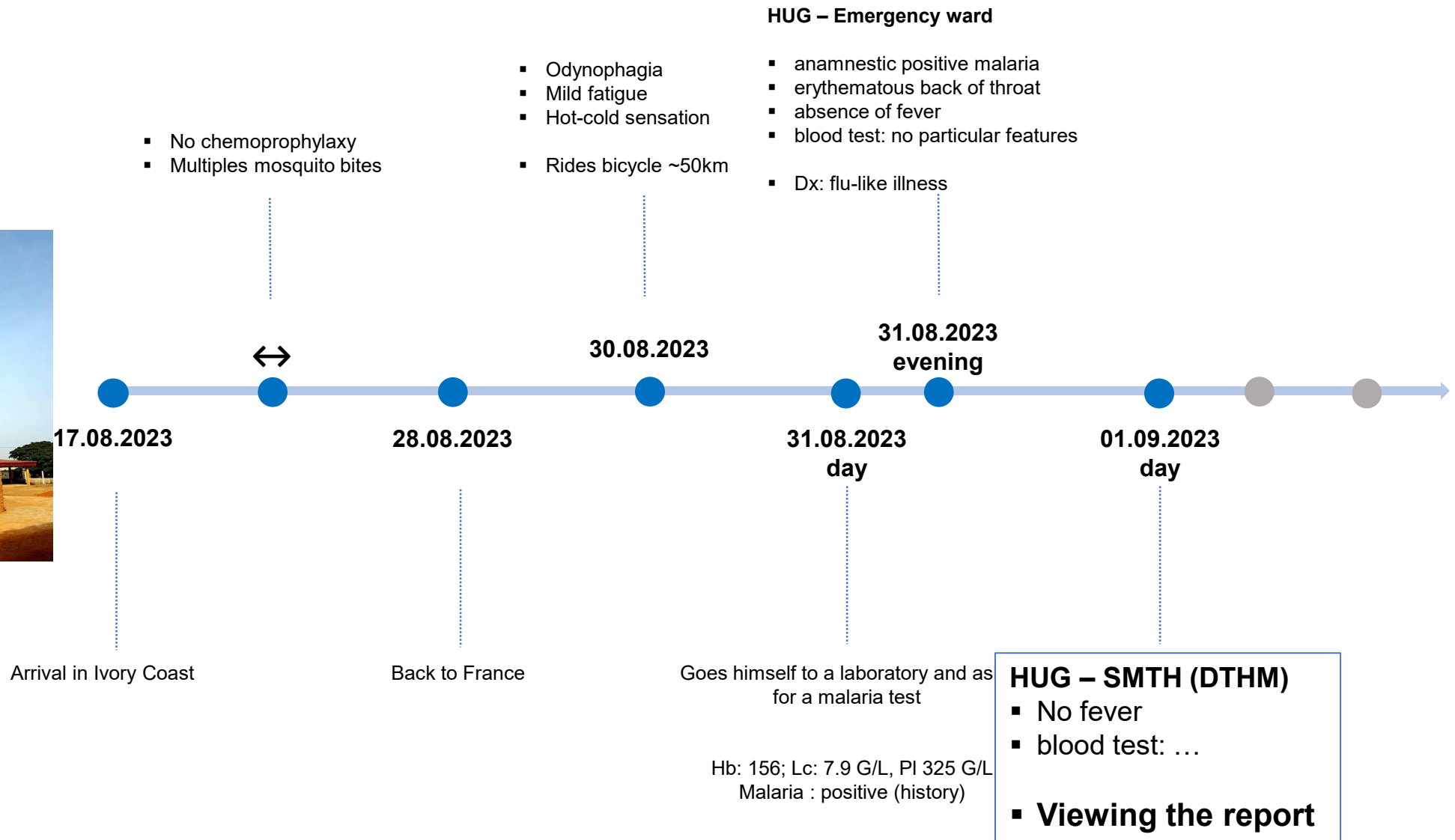
male, 39 y.o. french, in usual good health

Quizz

- It's Friday late afternoon, what are you doing? *Choose the best possible proposal*
 - a) Continue symptomatic treatment (because false-positive RDT)
 - b) Start Riamet[®] treatment
 - c) Add a PCR to be sent to Basel and reserve treatment with Riamet[®]
 - d) Obtain final report from first laboratory +/- slides of thin smear
 - e) Add serologies for mononucleosis syndromes (EBV, CMV, HIV, toxoplasmosis, etc.)

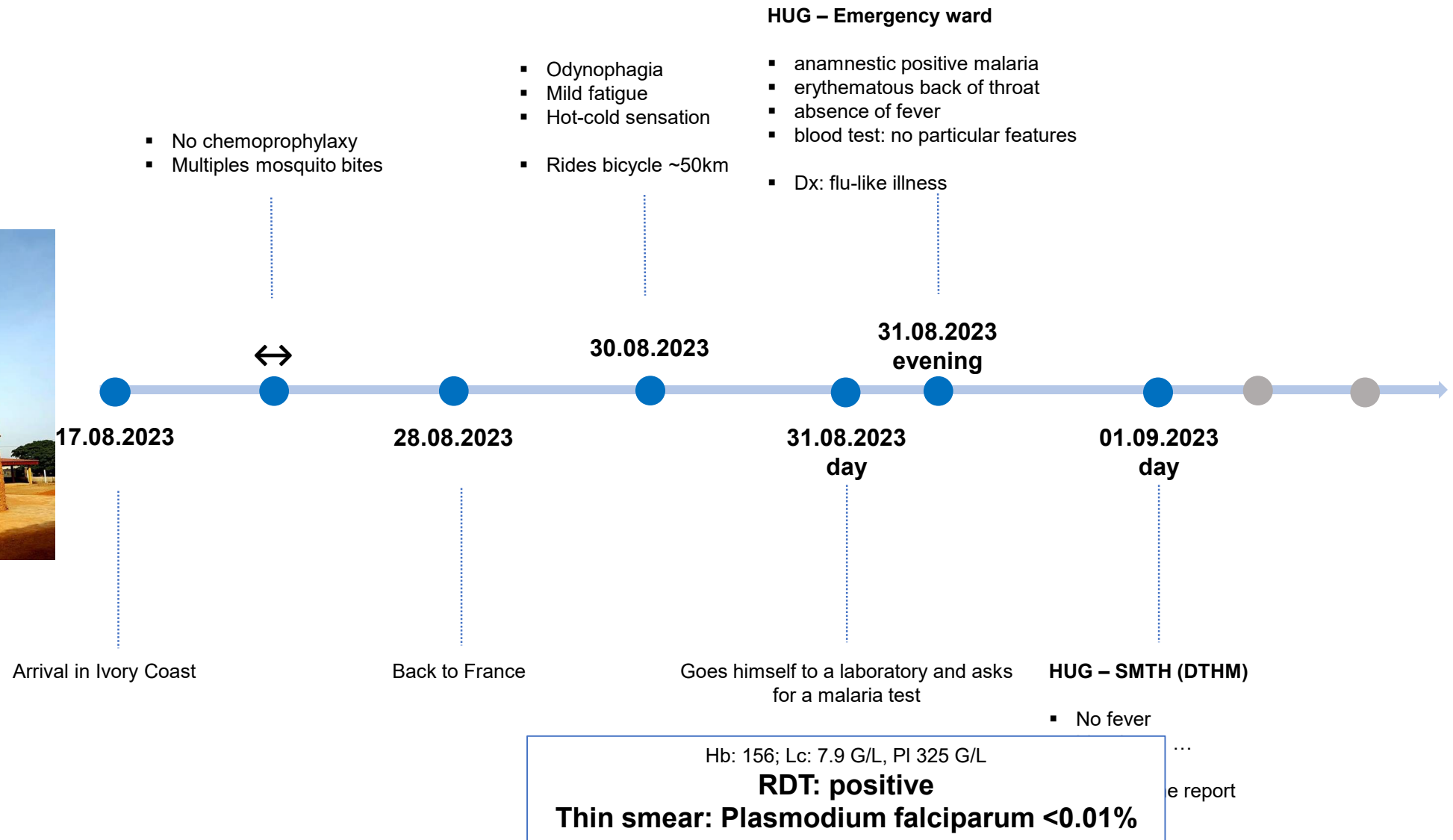
GVA-2 :

male, 39 y.o. french, in usual good health



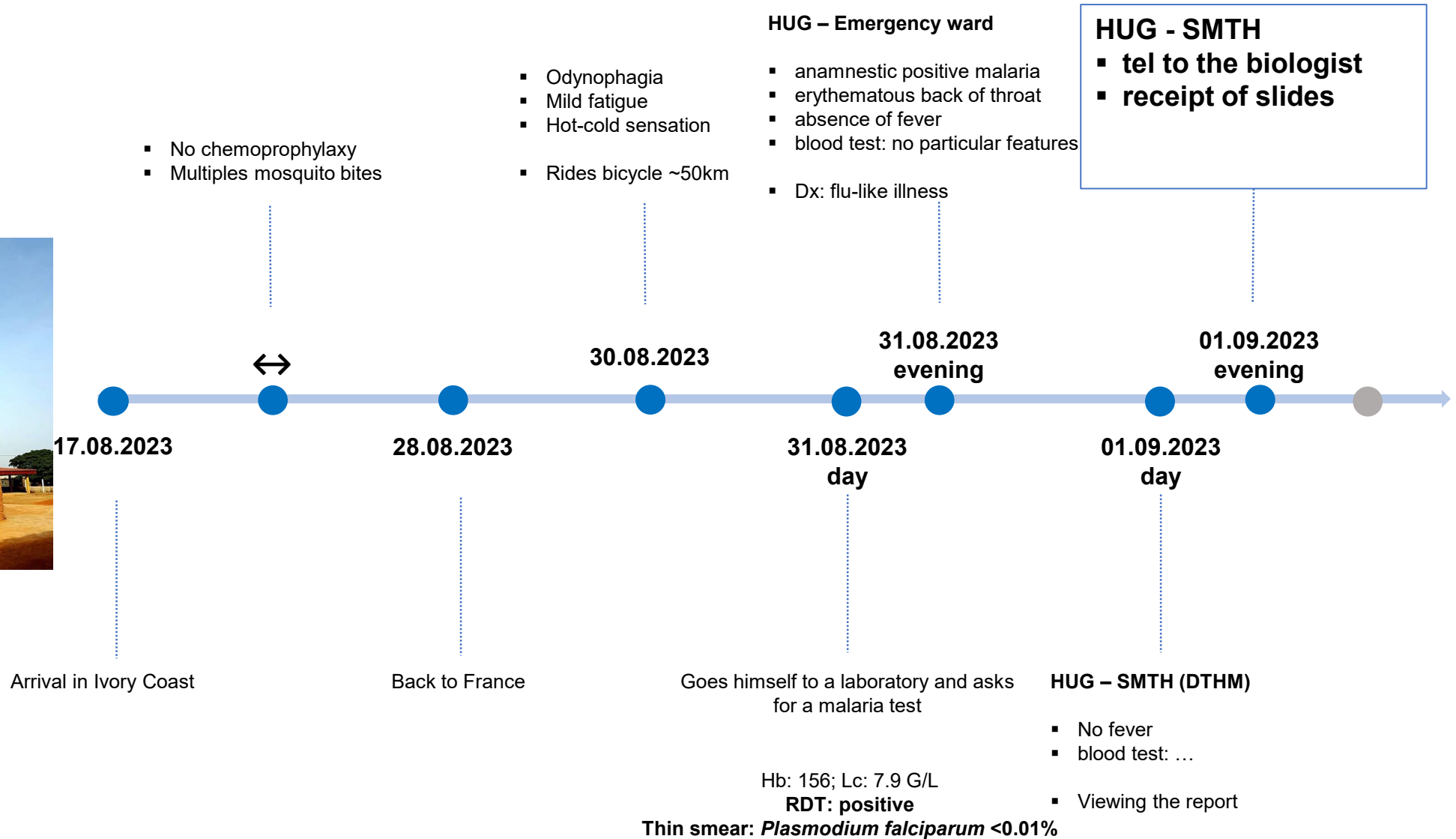
GVA-2 :

male, 39 y.o. french, in usual good health



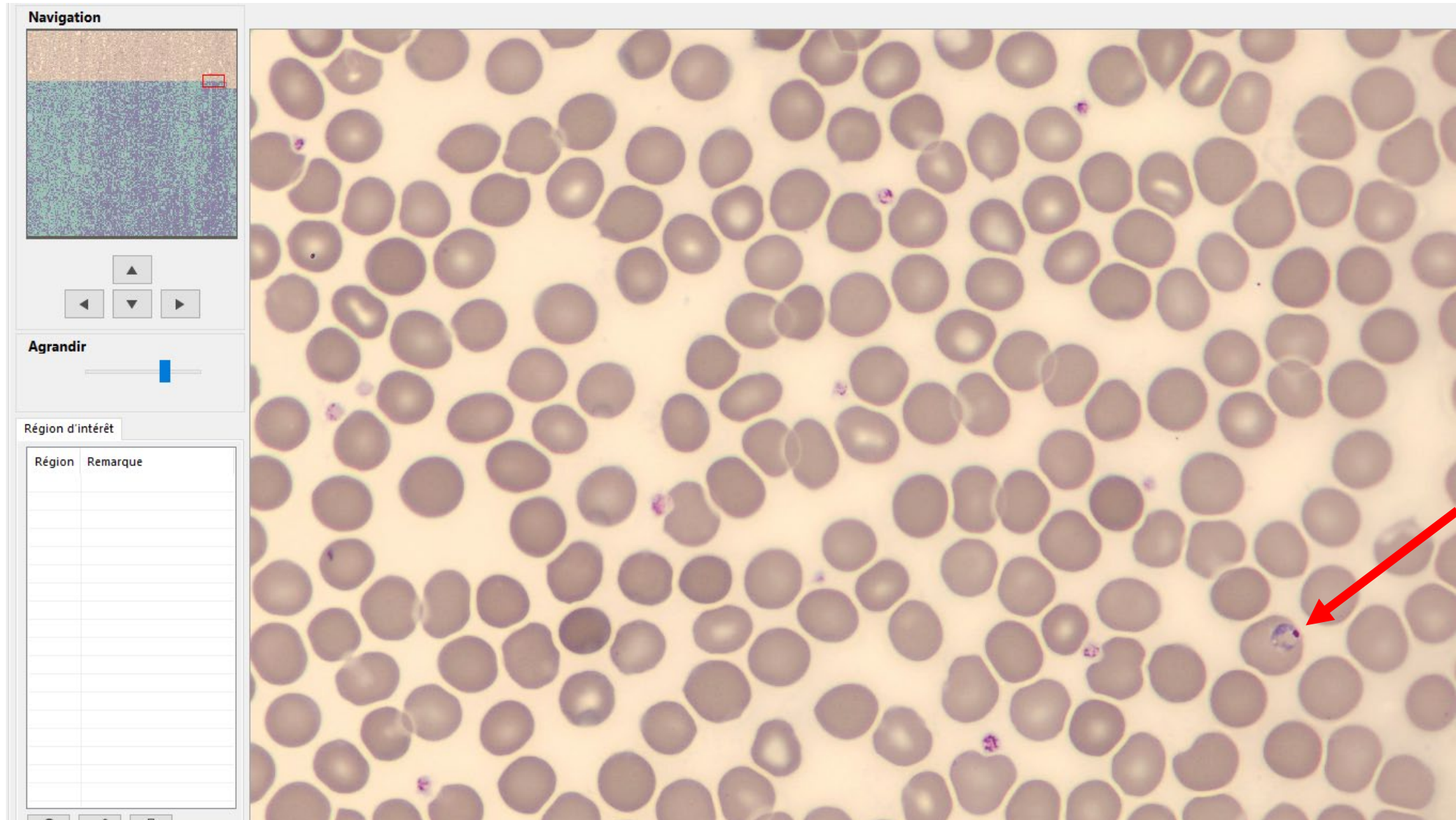
GVA-2 :

male, 39 y.o. french, in usual good health



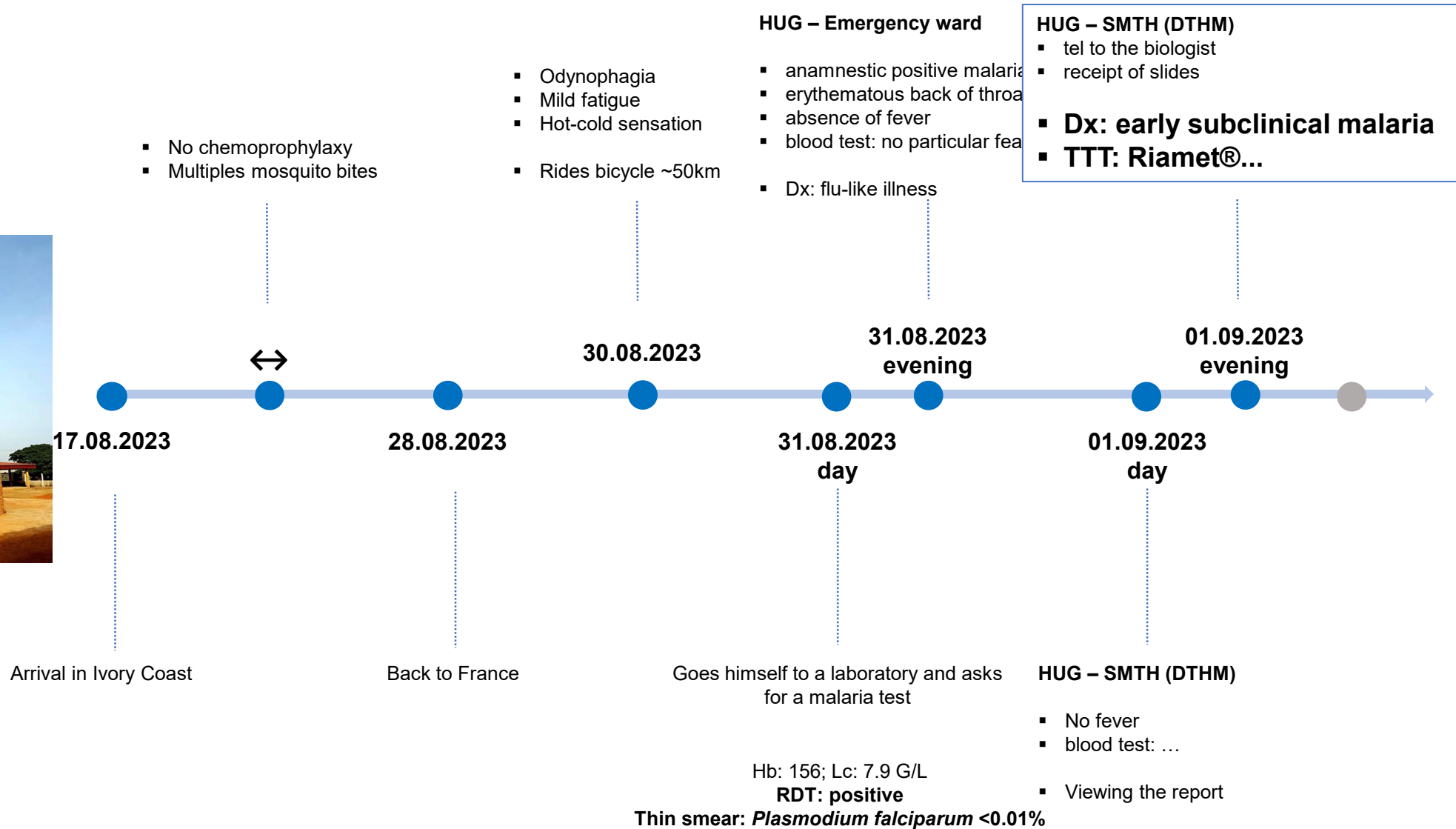
GVA-2 :

male, 39 y.o. french, in usual good health



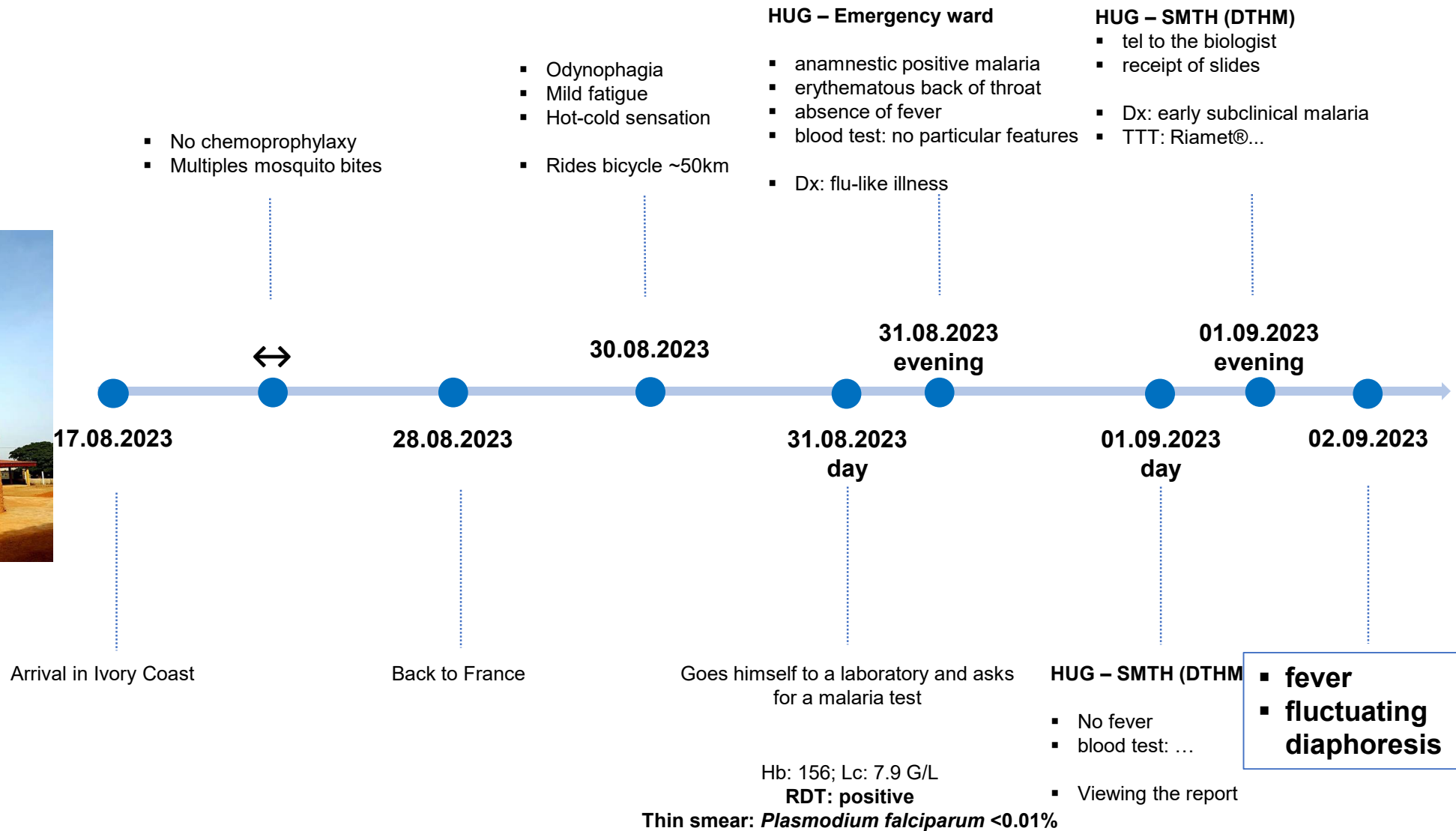
GVA-2 :

male, 39 y.o. french, in usual good health



GVA-2 :

male, 39 y.o. french, in usual good health





**THANK YOU FOR
YOUR ATTENTION!**

ANY QUESTIONS?

**NO? GREAT!
BYE.**

