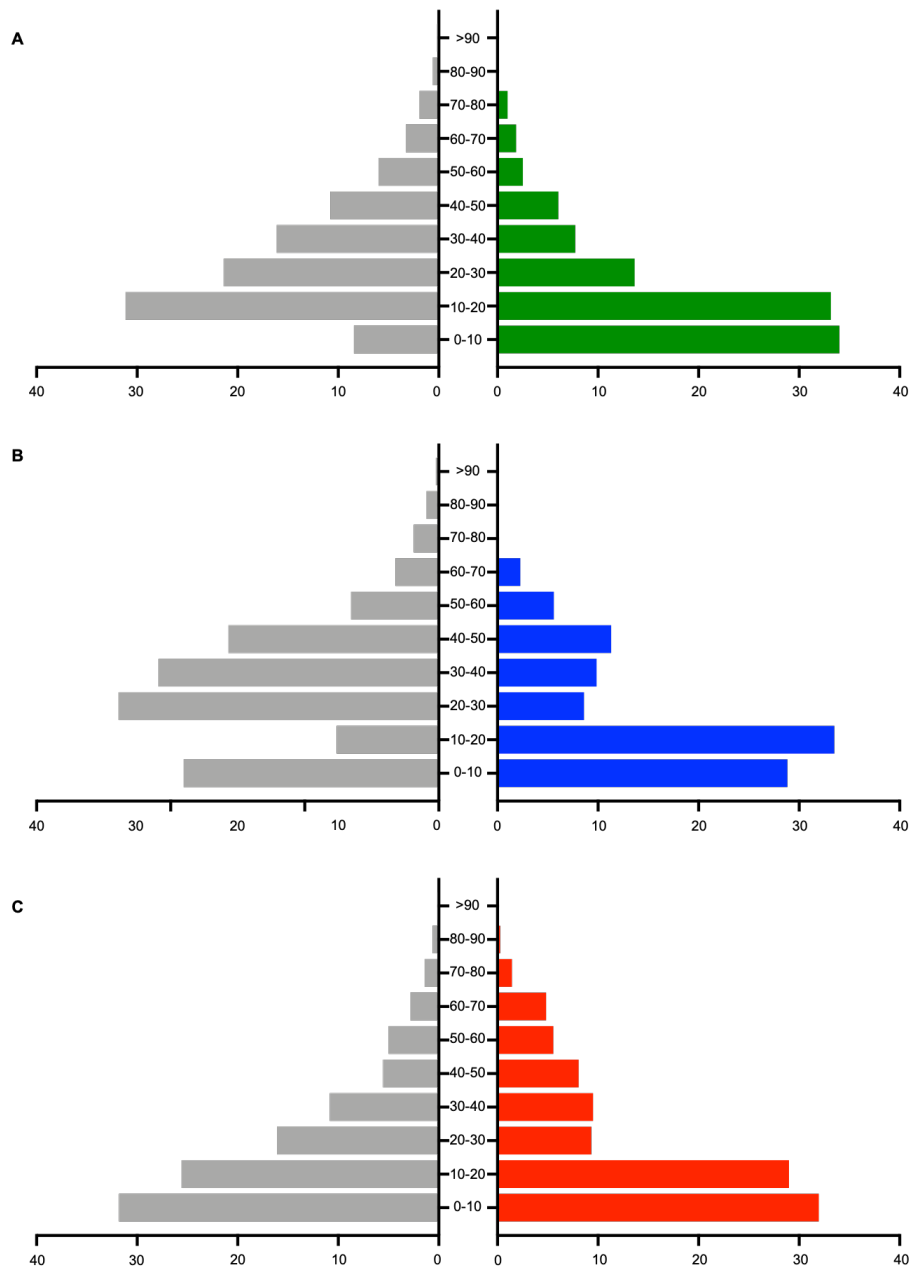


**Supplementary Figure 1: Map of study sites**  
 Adapted from Google Maps



**Supplementary Figure 2: Age structure of A) Sotuba (urban), B) Bancoumana (rural), and C) Donéguébougou (rural). Age group in years (y-axis) versus percentage of overall population (x-axis).**

Grey histograms represent census data for each study site.

Colored histograms represent sample for each study site.

**Supplementary Table 1: Seroprevalence of SARS-CoV-2 antibodies at visit 1 and visit 2 at Sotuba (urban), Bancoumana (rural town) and Donéguébougou (rural) sites.**

Site	Dates of sample collection	Crude seropositivity rate (95% CI)	Adjusted seropositivity rate (95% CI) <sup>1</sup>
Sotuba (visit 1) N=587	29 July to 16 October 2020	13.1% (10.4-15.9)	19.0% (14.2-23.8)
Sotuba (visit 2) N=528	21 December 2020 to 26 January 2021	44.9% (40.7-49.1)	70.4% (56.8-84.1)
Bancoumana (visit 1) N=963	29 July to 24 September 2020	5.3% (3.9-6.7)	6.5% (4.1-9.0)
Bancoumana (visit 2) N=904	28 December 2020 to 29 January 2021	35.5% (32.4-38.6)	52.1% (41.9-62.3)
Donéguébougou (visit 1) N=1109	28 July to 27 August 2020	4.1% (2.9-5.2)	5.0% (2.8-7.1)
Donéguébougou (visit 2) N=1088	14 December 2020 to 15 January 2021	25.8% (23.2-28.4)	35.0% (27.9-42.1)

<sup>1</sup>Adjusted for population age distribution and assay sensitivity and specificity [1].

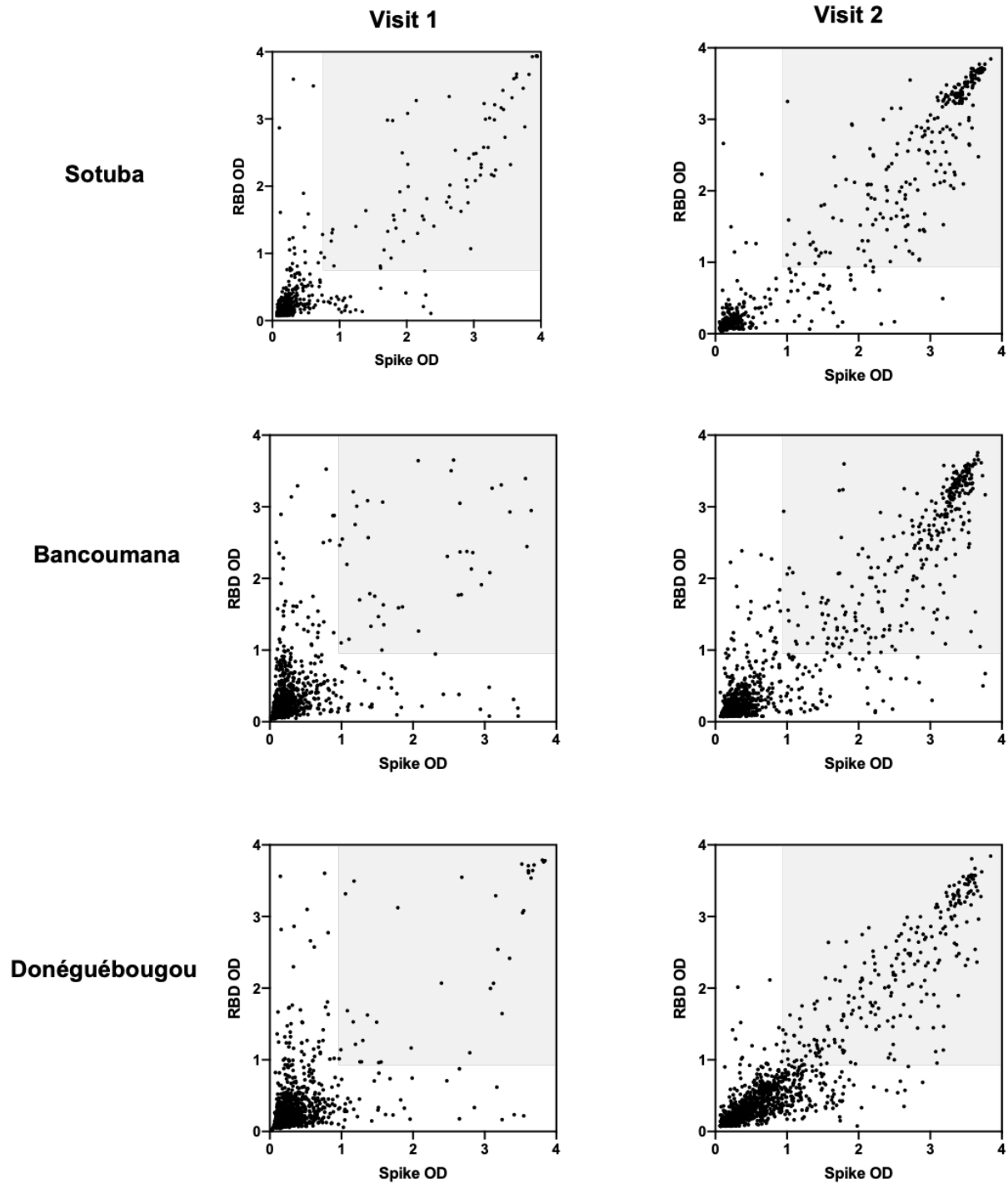
- Lang, Z. and J. Reiczigel, *Confidence limits for prevalence of disease adjusted for estimated sensitivity and specificity*. Prev Vet Med, 2014. **113**(1): p. 13-22.

**Supplementary Table 2: Age-stratified seroprevalence of SARS-CoV-2 antibodies at visit 1 and visit 2 at Sotuba (urban), Bancoumana (rural town) and Donéguébougou (rural) sites.**

Site	Dates of sample collection	Crude seropositivity rate (95% CI)			Adjusted seropositivity rate (95% CI) <sup>1</sup>		
		<10 years	10-17 years	≥18 years	<10 years	10-17 years	≥18 years
Sotuba (visit 1) N=587	29 July to 16 October 2020	10.7% (6.3-15.1)	11.7% (6.6-16.7)	16.2% (11.4-21.0)	13.8% (8.4-19.2)	15.1% (9.0-21.1)	21.3% (14.8-27.8)
Sotuba (visit 2) N=528	21 December 2020 to 26 January 2021	29.1% (22.4-35.7)	47.3% (39.4-55.2)	57.2% (50.4-64.0)	38.8% (28.9-48.7)	63.7% (49.5-77.9)	77.2% (61.5-92.9)
Bancoumana (visit 1) N=963	29 July to 24 September 2020	4.0% (1.5-6.4)	6.0% (3.1-8.8)	5.7% (3.4-8.1)	4.6% (1.6-7.6)	7.3% (3.8-10.9)	7.0% (3.9-10.1)
Bancoumana (visit 2) N=904	28 December 2020 to 29 January 2021	24.2% (19.1-29.4)	36.6% (30.8-42.4)	42.6% (37.6-47.6)	32.3% (24.2-40.3)	49.2% (38.3-60.0)	57.3% (45.6-69.0)
Donéguébougou (visit 1) N=1109	28 July to 27 August 2020	3.1% (1.2-5.1)	1.7% (0.0-3.5%)	6.2% (4.0-8.5)	3.4% (0.9-6.0%)	1.5% (0-3.9)	7.7% (4.6-10.8)
Donéguébougou (visit 2) N=1088	14 December 2020 to 15 January 2021	12.2% (8.8-15.7)	28.5% (23.2-33.7)	34.7% (30.4-39.1)	15.8% (11.0-20.7)	41.0% (31.5-50.5)	46.6% (36.8-56.3)

<sup>1</sup>Adjusted for assay sensitivity and specificity [1].

1. Lang, Z. and J. Reiczigel, *Confidence limits for prevalence of disease adjusted for estimated sensitivity and specificity*. *Prev Vet Med*, 2014. **113**(1): p. 13-22.



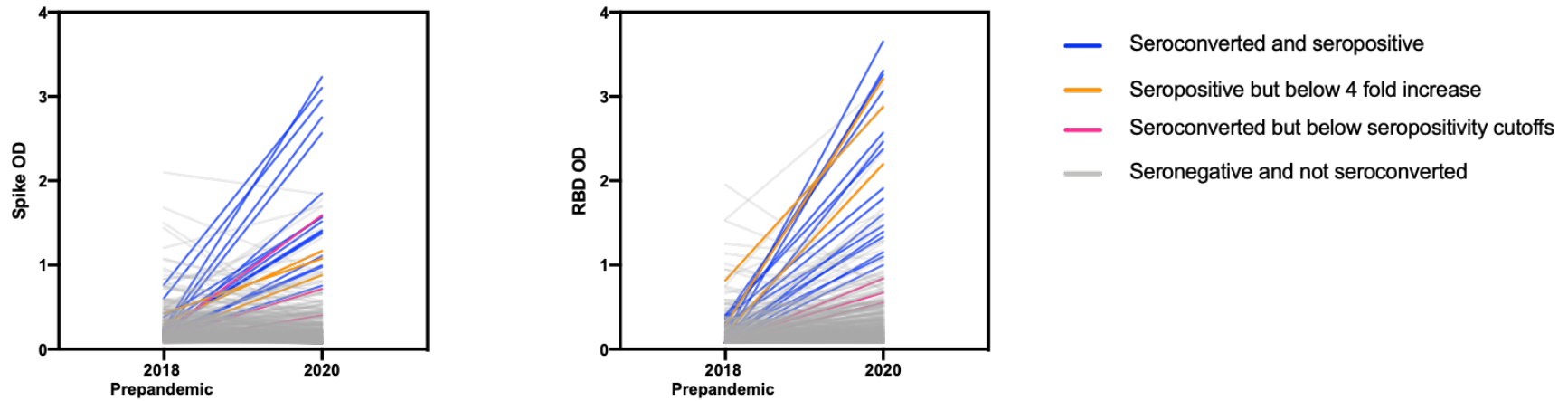
**Supplementary Figure 3: SARS-CoV-2 antibody reactivity to spike protein and RBD over time at study sites: Sotuba (top row), Bancoumana (middle row) and Donéguébougou (bottom row).**

RBD: receptor binding domain, OD: optical density

Visit 1: 28 July to 16 October 2020

Visit 2: 14 December 2020 to 29 January 2021

Shaded region represents ELISA measurements that exceed cutoffs to define seropositive cases



**Supplementary Figure 4: Seroconversion and seropositivity of SARS-CoV-2 antibodies to spike protein and RBD in 402 participants with pre-pandemic blood samples from Bancoumana**

RBD: receptor binding domain, OD: optical density

Seroconversion: fourfold increase in spike protein and RBD OD value from pre-pandemic sample

Seropositive: spike protein and RBD OD value above cutoff

**Supplementary Table 3: Univariate comparison of seronegative and seropositive subpopulations at visit 1 (n=2659, July/October 2020)**

	Seronegative	Seropositive	p-value
Sample size	2486	173	
Co-enrolled infants	13	0	
<b>Demographics</b>			
Sex, male (% , n/N)	50.9% (1266/2486)	41.6% (72/173)	<b>0.0184</b>
Age, years (median, IQR)	14 (8-31)	18 (10-36)	<b>0.0066</b>
Age group (% , n/N)			
<10 years	31.5% (783/2486)	24.9% (43/173)	
10-17 years	28.0% (696/2486)	23.7% (41/173)	
>=18 years	40.5% (1007/2486)	51.4% (89/173)	
<b>Medical factors (% (n/N))</b>			
Any comorbidity	1.5% (37/2473)	2.9% (5/173)	0.1929
Pregnancy (any stage)	0.8% (21/2473)	1.2% (2/173)	0.6595
Smoking	2.8% (66/2343)	2.5% (4/157)	>0.9999
Antimalarial use	2.1% (52/2473)	3.5% (6/173)	0.2726
BCG administration	80.5% (1992/2473)	79.8% (138/173)	0.7668
<b>Social factors</b>			
Works at healthcare facility	2.8% (69/2473)	5.8% (10/173)	<b>0.0352</b>
Household member works at healthcare facility	12.8% (317/2473)	19.7% (34/173)	<b>0.0145</b>
Household size (mean, SD)	7.6 (4.2)	8.6 (5.4)	<b>0.0043</b>
<b>Symptoms (% , n/N)</b>			
No symptoms since onset pandemic	91.2% (2242/2486)	79.2% (137/173)	
Symptoms since March 2020 (any)	9.8% (244/2486)	20.8% (36/173)	<b>&lt;0.0001</b>
<b>Systemic symptoms (any)</b>	6.4% (159/2473)	14.5% (25/173)	<b>0.0003</b>
Fever	4.0% (100/2473)	8.7% (15/173)	<b>0.0101</b>
Chills	0.4% (9/2473)	1.7% (3/173)	<b>0.0390</b>
Fatigue	0.7% (17/2473)	1.2% (2/173)	0.3557
Myalgia	0.7% (18/2473)	3.5% (6/173)	<b>0.0036</b>
Headache	3.7% (91/2473)	11.0% (19/173)	<b>&lt;0.0001</b>
<b>Respiratory symptoms (any)</b>	4.5% (112/2473)	8.1% (14/173)	<b>0.0413</b>
Sore throat	0.4% (9/2473)	1.2% (2/173)	0.1587
Cough	2.4% (59/2473)	4.1% (7/173)	0.1989
Rhinorrhea	3.6% (89/2473)	5.2% (9/173)	0.2932
Dyspnea	0% (0/2473)	0% (0/173)	>0.9999
Wheezing	0% (0/2473)	0% (0/173)	>0.9999
Loss of smell/taste	0.2% (4/2473)	0.6% (1/173)	0.2871
Other respiratory symptoms	<0.1% (1/2473)	0% (0/173)	>0.9999
<b>Gastrointestinal symptoms (any)</b>	2.7% (67/2473)	5.8% (10/173)	<b>0.0313</b>
Nausea/vomiting	1.5% (37/2473)	2.9% (5/173)	0.1929
Abdominal pain	1.3% (31/2473)	2.9% (5/173)	0.0819
Diarrhea	0.6% (16/2473)	0.6% (1/173)	>0.9999
<b>Symptom severity (% , n/N)<sup>1</sup></b>			
Missed work or school	39.2% (93/237)	36.1% (13/36)	0.8547
Sought medical attention	49.4% (117/237)	33.3% (12/36)	0.0765
Hospitalized <sup>2</sup>	0.4% (1/237)	0% (0/36)	>0.9999
Duration of symptoms (any) (mean, SD)	6.4 (8.2)	3.6 (3.0)	0.1126
Symptomatic at visit 1	21.1% (50/237)	36.1% (13/36)	0.0564

<sup>1</sup>Indices of symptom severity collected in participants reporting any symptoms. Details were not collected from infants aged 6-12 months.

<sup>2</sup>Reported hospitalization: seronegative case: 8 year old female with fever, and nausea and vomiting.

**Supplementary Table 4: Univariate comparison of seronegative and new seropositive subpopulations at visit 2 (n=2353, July/October 2020 to December 2020/January 2021)**

	Seronegative <sup>1</sup>	Seropositive <sup>2</sup>	p-value
Sample size	1629	724	
Co-enrolled infants	10	0	
<b>Demographics</b>			
Sex, male (%, n/N)	51.7% (843/1629)	49.6% (359/724)	0.3482
Age, years (median, IQR)	12 (7-28)	18 (11-27)	<b>&lt;0.0001</b>
Age group (%, n/N)			
<10 years	37.7% (614/1629)	18.5% (134/724)	
10-17 years	26.5% (432/1629)	30.7% (222/724)	
>=18 years	35.8% (583/1629)	50.8% (368/724)	
Days between enrollment and follow up (mean, SD)	128.1 (13.1)	129.1 (19.8)	0.1686
<b>Medical factors (% (n/N))</b>			
Any comorbidity	1.1% (17/1619)	2.2% (16/724)	<b>0.0358</b>
Pregnancy (any stage)	0.6% (10/1629)	1.2% (9/724)	0.1361
Smoking	3.2% (51/1619)	2.1% (15/724)	0.1763
Antimalarial use	2.0% (32/1619)	1.9% (14/724)	>0.9999
BCG administration	81.5% (1320/1619)	77.2% (559/724)	<b>0.0159</b>
<b>Social factors</b>			
Works at healthcare facility	3.2% (52/1619)	2.2% (16/724)	0.2302
Household member works at healthcare facility	11.2% (181/1619)	16.0% (116/724)	<b>0.0015</b>
Household size (mean, SD)	7.6 (4.2)	7.5 (4.3)	0.8194
<b>Symptoms (%, n/N)</b>			
No symptoms since visit 1	50.7% (826/1629)	51.4% (372/724)	
Symptoms since visit 1 (any)	49.3% (803/1629)	48.6% (352/724)	0.7887
<b>Systemic symptoms (any)</b>	22.7% (368/1619)	27.8% (201/724)	<b>0.0092</b>
Fever	8.3% (134/1619)	9.9% (72/724)	0.2064
Chills	2.1% (34/1619)	3.7% (27/724)	<b>0.0250</b>
Fatigue	2.5% (41/1619)	4.3% (31/724)	<b>0.0275</b>
Myalgia	2.4% (39/1619)	2.9% (21/724)	0.4817
Headache	19.1% (309/1619)	22.7% (164/724)	0.0512
<b>Respiratory symptoms (any)</b>	36.9% (598/1619)	32.3% (234/724)	<b>0.0317</b>
Sore throat	3.0% (48/1619)	2.8% (20/724)	0.8942
Cough	21.6% (349/1619)	19.1% (138/724)	0.1860
Rhinorrhea	29.7% (481/1619)	26.1% (189/724)	0.0752
Dyspnea	0.2% (4/1619)	0.3% (2/724)	>0.9999
Wheezing	0% (0/1619)	0% (0/724)	>0.9999
Loss of smell/taste	1.3% (21/1619)	2.2% (16/724)	0.1083
Other respiratory symptoms	0.4% (6/1619)	0.1% (1/724)	0.4480
<b>Gastrointestinal symptoms (any)</b>	5.6% (90/1619)	7.0% (51/724)	0.1878
Nausea/vomiting	2.3% (38/1619)	3.7% (27/724)	0.0758
Abdominal pain	3.5% (56/1619)	5.0% (36/724)	0.0850
Diarrhea	1.1% (17/1619)	0.7% (5/724)	0.4927
<b>Symptom severity (%, n/N)<sup>3</sup></b>			
Missed work or school	12.5% (100/797)	15.6% (55/352)	0.1611
Sought medical attention	45.9% (366/797)	63.4% (223/352)	<b>&lt;0.0001</b>
Hospitalized <sup>4</sup>	0.3% (2/797)	0.9% (3/352)	0.1711
Duration of symptoms (any) (mean, SD)	4.5 (6.2)	4.4 (3.1)	0.190
Symptomatic at visit 2	38.3% (305/797)	32.1% (113/352)	<b>0.0463</b>

<sup>1</sup>Seronegative refers to seronegative individuals at visit 1 and visit 2



<sup>2</sup>Seropositive refers to new seropositive individuals at visit 2 (seronegative at visit 1)

<sup>3</sup>Indices of symptom severity collected in participants reporting any symptoms. Details were not collected from infants aged 6-12 months.

<sup>4</sup>Reported hospitalizations: seronegative cases: 22 year old female with fever, headache, nausea and vomiting, and abdominal pain, 14 year old male with cough. Seropositive cases: 2 year old male with fever, cough and rhinorrhea, 12 year old male with headache, and 30 year old male with fever, headache and rhinorrhea.

**Supplementary Table 5: Longitudinal assessment of participants seropositive at visit 1 (n=157, July/October 2020 to December 2021/January 2021)**

	<b>Sotuba</b>	<b>Bancoumana</b>	<b>Donéguébougou</b>	<b>Overall</b>
Sample size	66	46	45	157
Serostable (% <sup>1</sup> , n/N) (Seropositive/Seropositive)	83.3% (55/66)	67.4% (31/46)	64.4% (29/45)	73.2% (115/157)
Seroreverted (% <sup>1</sup> , n/N) (Seropositive/Seronegative)	16.7% (11/66)	32.6% (15/46)	35.6% (16/45)	26.8% (42/157)
Spike OD at enrollment (mean, SD)	2.73 (0.871)	1.92 (0.90)	2.23 (1.17)	2.35 (1.03)
RBD OD at enrollment (mean, SD)	2.35 (0.91)	2.29 (0.82)	2.30 (1.11)	2.32 (0.94)
Days between enrollment and follow up (mean, SD)	139.4 (14.2)	123.4 (11.5)	128.6 (11.8)	131.6 (14.5)
Rate of change Spike OD (OD/100 days) (mean, 95% CI)	-0.11 (-0.32 to 0.10)	-0.03 (-0.319 to 0.259)	-0.15 (-0.34 to 0.04)	-0.10 (-0.23 to 0.03)
Rate of change RBD OD (OD/100 days) (mean, 95% CI)	-0.26 (-0.48 to -0.04)	-0.66 (-0.87 to -0.45)	-0.60 (-0.82 to -0.38)	-0.47 (-0.60 to -0.34)

**Supplementary Table 6: Univariate comparison of serostatus at visit 2 in participants seropositive at visit 1 (n=157, July/October 2020 to December 2021/January 2021)**

	Seropositive <sup>1</sup>	Seronegative <sup>2</sup>	p-value
Sample size	115	42	
Co-enrolled infants	0	0	
<b>Demographics</b>			
Sex, male (%, n/N)	36.5% (42/115)	54.8% (19/42)	<b>0.0456</b>
Age, years (median, IQR)	20 (10-39.5)	11.5 (8-28)	0.0691
Age group (%, n/N)			
<10 years	21.7% (25/115)	33.3% (14/42)	
10-17 years	20.9% (24/115)	30.9% (13/42)	
>=18 years	57.4% (66/115)	35.7% (15/42)	
Days between enrollment and follow up (mean, SD)	132.4 (14.9)	129.3 (13.2)	0.2287
<b>Medical factors (% (n/N))</b>			
Any comorbidity	2.6% (3/115)	0% (0/42)	0.5641
Pregnancy (any stage)	1.7% (2/115)	0% (0/42)	>0.9999
Smoking	1.7% (2/115)	4.8% (2/42)	0.2905
Antimalarial use	3.5% (4/115)	2.4% (1/42)	>0.9999
BCG administration	80.9% (93/115)	81.0% (34/42)	>0.9999
<b>Social factors</b>			
Works in healthcare	5.2% (6/115)	7.1% (3/42)	0.7017
Household member works in healthcare	19.1% (22/115)	19.0% (8/42)	>0.9999
Household size (mean, SD)	9.1 (6.1)	7.1 (3.3)	<b>0.0495</b>
<b>Symptoms (%, n/N)</b>			
No symptoms since visit 1	49.1% (68/115)	54.8% (23/42)	
Symptoms since visit 1	40.9% (47/115)	45.2% (19/42)	0.7155
<b>Systemic symptoms</b>			
	23.5% (27/115)	28.6% (12/42)	0.5354
Fever	11.3% (13/115)	9.5% (4/42)	>0.9999
Chills	4.3% (5/115)	2.4% (1/42)	>0.9999
Fatigue	7.0% (8/115)	9.5% (4/42)	0.7347
Myalgia	7.0% (8/115)	2.4% (1/42)	0.4462
Headache	20.9% (24/115)	21.4% (9/42)	>0.9999
<b>Respiratory symptoms</b>			
	31.3% (36/79)	26.2% (11/42)	0.6941
Sore throat	5.2% (6/115)	2.4% (1/42)	0.6756
Cough	18.3% (21/115)	14.3% (6/42)	0.6397
Rhinorrhea	23.5% (27/115)	21.4% (9/42)	0.8340
Dyspnea	0% (0/115)	2.4% (1/42)	0.2675
Wheezing	0% (0/115)	0% (0/42)	>0.9999
Loss of smell/taste	3.5% (4/115)	4.8% (2/42)	0.5743
Other respiratory symptoms	0% (0/115)	0% (0/42)	>0.9999
<b>Gastrointestinal symptoms</b>			
	9.6% (11/115)	7.1% (3/42)	0.7610
Nausea/vomiting	5.2% (6/115)	2.4% (1/42)	0.6756
Abdominal pain	5.2% (6/115)	7.1% (3/42)	0.7017
Diarrhea	0.9% (1/115)	0% (0/42)	>0.9999
<b>Symptom severity</b>			
Missed work or school	23.4% (11/47)	15.8% (3/19)	0.7407
Sought medical attention	57.4% (27/47)	63.2% (12/19)	0.7849
Hospitalized	0% (0/47)	0% (0/19)	>0.9999
Duration of symptoms (any) (mean, SD)	4.9 (5.4)	2.8 (1.9)	0.1870
Symptomatic at Visit 2	29.8% (14/47)	36.8% (7/19)	0.5748

<sup>1</sup>Seropositive refers to participants seropositive at visit 1 and serostable at visit 2

<sup>2</sup>Seronegative refers to participants seropositive at visit 1 and seronegative at visit 2.

**Supplementary Table 7: Adverse events according to serostatus between visit 1 (July/August 2020) and visit 2 (December 2020/January 2021) in individuals co-enrolled in a clinical trial at the Bancoumana site (n=146)**

	Seronegative <sup>1</sup>	Seropositive <sup>2</sup>	p-value
Sample size	85	61	
<b>Adverse event (% , n/N)</b>			
<b>Clinical, possibly COVID-19 related</b>			
Abdominal pain	1.2% (1/85)	1.6% (1/61)	>0.9999
Bronchitis	3.5% (3/85)	1.6% (1/61)	0.6403
Cough	1.2% (1/85)	3.3% (2/61)	0.5714
Chills	0% (0/85)	1.6% (1/61)	0.4218
Decreased appetite	0% (0/85)	1.6% (1/61)	0.4218
Enteritis	0% (0/85)	1.6% (1/61)	0.4178
Gastroenteritis	2.4% (2/85)	0% (0/61)	0.5102
Headache	15.3% (13/85)	11.5% (7/61)	0.6280
Influenza (clinical)	2.4% (2/85)	3.3% (2/61)	>0.9999
Nausea	1.2% (1/85)	0% (0/61)	>0.9999
Paronychia	1.2% (1/85)	0% (0/61)	>0.9999
Pyrexia	0% (0/85)	1.6% (1/61)	0.4296
Rhinitis	23.5% (20/85)	34.4% (21/61)	0.2619
Sinobronchitis	3.5% (3/85)	3.3% (2/61)	>0.9999
<b>Clinical, other</b>			
Back pain	0% (0/85)	1.6% (1/61)	0.4218
Conjunctivitis	9.4% (8/81)	3.3% (2/61)	0.1938
Dental caries	9.4% (8/85)	0% (0/61)	0.0209
Dermatosis	1.2% (1/85)	0% (0/61)	>0.9999
Dizziness	1.2% (1/85)	0% (0/61)	>0.9999
Ear infection	0% (0/85)	1.6% (1/61)	0.4178
Ecchymosis	0% (0/85)	1.6% (1/61)	0.4178
Eye burns	1.2% (1/85)	0% (0/61)	>0.9999
Food poisoning	1.2% (1/85)	1.6% (1/61)	>0.9999
Gastritis	2.4% (2/85)	6.6% (4/61)	0.2361
Genitourinary tract infection	2.4% (2/85)	3.3% (2/61)	>0.9999
Hemorrhoids	1.2% (1/85)	0% (0/61)	>0.9999
Hypertension	1.2% (1/85)	0% (0/61)	>0.9999
Malaria	29.4% (25/85)	32.8% (20/61)	0.7179
Oropharyngeal pain	1.2% (1/85)	0% (0/61)	>0.9999
Pain	0% (0/85)	8.2% (5/61)	<b>0.0139</b>
Strangulated umbilical hernia	1.2% (1/85)	0% (0/61)	>0.9999
Tonsillitis	0% (0/85)	1.6% (1/61)	0.4207
Typhoid fever	2.4% (2/81)	3.3% (2/61)	>0.9999
Urticaria	1.2% (1/85)	0% (0/61)	>0.9999
Wound	4.7% (8/84)	8.2% (5/61)	0.4913
<b>Laboratory</b>			
Alanine aminotransferase increased	1.2% (1/85)	0% (0/61)	>0.9999
Blood creatinine increased	4.7% (4/85)	1.6% (1/61)	0.0836
Hemoglobin decreased	0% (0/85)	0% (0/61)	>0.9999
Leukopenia	4.7% (4/85)	9.8% (6/61)	0.2020
Neutropenia	5.9% (5/85)	11.5% (7/61)	0.2397
Thrombocytopenia	0% (0/85)	3.3% (2/61)	0.1729
White blood cell count increased	1.2% (1/85)	0% (0/61)	>0.9999

<sup>1</sup>Seronegative refers to seronegative individuals at visit 1 and visit 2

<sup>2</sup>Seropositive refers to new seropositive individuals at visit 2 (seronegative at visit 1)

**Supplementary Table 8: Grading of commonly reported adverse events in individuals co-enrolled in a clinical trial at the Bancoumana site (n=146)**

	Seronegative <sup>1</sup>	Seropositive <sup>2</sup>
Sample size	85	61
<b>Adverse event (%, n/N)</b>		
Headache	15.3% (13/85)	11.5% (7/61)
Grade 1	15.4% (2/13)	14.3% (1/7 )
Grade 2	84.6% (11/13)	85.7% (6/7)
Grade 3	0% (0/13)	0% (0/7)
Rhinitis	23.5% (20/85)	34.4% (21/61)
Grade 1	5.0% (1/20)	0% (0/21)
Grade 2	95.0% (19/20)	100% (21/21)
Grade 3	0% (0/20)	0% (0/21)
Malaria	29.4% (25/85)	32.8% (20/61)
Grade 1	0% (0/25)	0% (0/20)
Grade 2	96.0% (24/25)	100% (20/20)
Grade 3	4.0% (1/25)	0% (0/20)

<sup>1</sup>Seronegative refers to seronegative individuals at visit 1 and visit 2

<sup>2</sup>Seropositive refers to new seropositive individuals at visit 2 (seronegative at visit 1)

**Supplementary Table 9: Adverse events according to serostatus between visit 1 (July/August 2020) and visit 2 (December 2020/January 2021) in individuals co-enrolled in a clinical trial at the Donéguébougou site (n=1037)**

	Seronegative <sup>1</sup>	Seropositive <sup>2</sup>	p-value
Sample size	785	252	
<b>Adverse event (% , n/N)</b>			
<b>Clinical, potentially COVID-19 related</b>			
Abdominal pain	3.1% (24/785)	3.6% (9/252)	0.6817
Arthralgia	0.5% (4/785)	0% (0/252)	0.5775
Bronchitis	2.3% (18/785)	3.2% (8/252)	0.4866
Chills	0.4% (3/785)	0.4% (1/252)	>0.9999
Cough	0.4% (3/785)	0.8% (2/252)	0.6002
Decreased appetite	0.8% (6/785)	1.2% (3/252)	0.4604
Diarrhoea	0.1% (1/785)	0% (0/252)	>0.9999
Gastroenteritis	1.4% (11/785)	2.4% (6/252)	0.2675
Headache	9.4% (74/785)	18.3% (46/252)	<b>0.0003</b>
Myalgia	0.6% (5/785)	0% (0/252)	0.3436
Nasopharyngitis	1.5% (12/785)	2.4% (6/252)	0.4053
Nausea	0% (0/785)	0.4% (1/252)	0.2430
Oropharyngeal pain	0.4% (3/785)	0% (0/252)	>0.9999
Pharyngitis	10.7% (84/785)	7.1% (18/252)	0.1138
Pneumonia	0.3% (2/785)	0% (0/252)	>0.9999
Pyrexia	1.9% (15/785)	3.6% (9/252)	0.1474
Rhinitis	25.1% (197/785)	33.3% (84/252)	<b>0.0116</b>
Rhinorrhoea	0.1% (1/785)	0% (0/252)	>0.9999
Sinobronchitis	1.5% (12/785)	0.4% (1/252)	0.2069
Vomiting	0.6% (5/785)	0% (0/252)	0.3436
<b>Clinical, other</b>			
Abscess	0.1% (1/785)	0% (0/252)	>0.9999
Abscess limb	0.1% (1/785)	0% (0/252)	>0.9999
Arthropod sting	0.1% (1/785)	0.4% (1/252)	0.4271
Asthenia	0.6% (5/785)	0.8% (2/252)	0.6795
Back pain	0.1% (1/785)	0% (0/252)	>0.9999
Chest pain	0.1% (1/785)	0% (0/252)	>0.9999
Conjunctivitis	0.3% (2/785)	0.4% (1/252)	0.5666
Dental caries	1.1% (9/785)	3.2% (8/252)	<b>0.0416</b>
Dermatosis	0.1% (1/785)	0% (0/252)	>0.9999
Dizziness	0.8% (6/785)	1.6% (4/252)	0.2681
Dysentery	0.4% (3/785)	0.8% (2/252)	0.6002
Dysmenorrhoea	0% (0/785)	0.4% (1/252)	0.2430
Ear infection	0.1% (1/785)	0% (0/252)	>0.9999
Epistaxis	0.1% (1/785)	0% (0/252)	>0.9999
Food poisoning	0.1% (1/785)	0% (0/252)	>0.9999
Fungal skin infection	0.1% (1/785)	0% (0/252)	>0.9999
Furuncle	0.1% (1/785)	0.4% (1/252)	0.4271
Gastritis	0.1% (1/785)	1.2% (3/252)	<b>0.0466</b>
Genital infection	0.1% (1/785)	0% (0/252)	>0.9999
Gingivitis	0.1% (1/785)	0% (0/252)	>0.9999
Hordeolum	0.1% (1/785)	0% (0/252)	>0.9999
Hypertension	0.1% (1/785)	0% (0/252)	>0.9999
Infection parasitic	0.1% (1/785)	0% (0/252)	>0.9999
Injection site pain	3.8% (30/785)	4.8% (12/252)	0.5812
Ligament sprain	0.1% (1/785)	0% (0/252)	>0.9999
Limb injury	0.4% (3/785)	0.4% (1/252)	>0.9999

Malaria	41.1% (323/785)	41.7% (105/252)	0.8834
Mastitis	0.1% (1/785)	0.4% (1/252)	0.4271
Otitis externa	0.3% (2/785)	0.4% (1/252)	0.5666
Otitis media	0.3% (2/785)	0.4% (1/252)	0.5666
Pain	0.3% (2/785)	0% (0/252)	>0.9999
Pruritus	0% (0/785)	0.4% (1/252)	0.2430
Sciatica	0.3% (2/785)	0% (0/252)	>0.9999
Snake bite	0.1% (1/785)	0% (0/252)	>0.9999
Tachycardia	0.3% (2/785)	0% (0/252)	>0.9999
Thermal burn	0.1% (1/785)	0% (0/252)	>0.9999
Tonsillitis	0.3% (2/785)	0.4% (1/252)	0.5666
Urinary tract infection	0.5% (4/785)	0.8% (2/252)	0.6369
Urticaria	0.3% (2/785)	0.8% (2/252)	0.2498
Wound	1.3% (10/785)	1.2% (3/252)	>0.9999
Wound infection	0.4% (3/785)	0.8% (2/252)	0.6002
<b>Laboratory</b>			
Alanine aminotransferase increased	0.8% (6/785)	1.6% (4/252)	>0.9999
Blood creatinine increased	0.8% (6/785)	1.2% (3/252)	0.4604
Hemoglobin decreased	0.3% (2/785)	1.2% (3/252)	0.0958
Leukocytosis	0.5% (4/785)	0.8% (2/252)	0.6369
Leukopenia	5.6% (44/785)	7.1% (18/252)	0.3624
Neutropenia	6.8% (53/785)	7.9% (20/252)	0.5712
Thrombocytopenia	0.6% (5/785)	1.6% (4/252)	0.2327

<sup>1</sup>Seronegative refers to seronegative individuals at visit 1 and visit 2

<sup>2</sup>Seropositive refers to new seropositive individuals at visit 2 (seronegative at visit 1)

**Supplementary Table 10: Grading of commonly reported adverse events in individuals co-enrolled in a clinical trial at the Donéguebougou site (n=1037)**

	Seronegative <sup>1</sup>	Seropositive <sup>2</sup>
Sample size	85	61
<b>Adverse event (% , n/N)</b>		
Headache	9.4% (74/785)	18.3% (46/252)
Grade 1	98.6% (73/74)	97.8% (45/46)
Grade 2	1.4% (1/74)	2.2% (1/46)
Grade 3	0% (0/74)	0% (0/46)
Rhinitis	25.1% (197/785)	33.3% (84/252)
Grade 1	91.4% (180/197)	90.5% (76/84)
Grade 2	7.1% (14/197)	9.5% (8/84)
Grade 3	1.5% (3/197)	0% (0/84)
Malaria	41.1% (323/785)	41.7% (105/252)
Grade 1	77.1% (249/323)	78.1% (82/105)
Grade 2	17.6% (57/323)	17.1% (18/105)
Grade 3	5.3% (17/323)	4.8% (5/105)

<sup>1</sup>Seronegative refers to seronegative individuals at visit 1 and visit 2

<sup>2</sup>Seropositive refers to new seropositive individuals at visit 2 (seronegative at visit 1)