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Supplemental Table 1. Targets and confirmation strategy of the multiplex macroarray “fever chip”

Pathogen	Target on chip	Confirmation PCR SA	Confirmation PCR CI BF
Adenovirus (Adv)	Hexon gene	Heim et al. 2003	FTD Neuro 9 §
<i>Borrelia burgdorferi</i>	Flagellin gene	Nunes et al. 2018	n.a.
<i>Brucella spp.</i>	OMP _a gene	Hinic et al. 2008	n.a.
Chikungunya virus (CHIKV)	Non-structural protein 1	Lanciotti et al. 2007	FTD Tropical fever core §
<i>Coxiella burnetii</i>	Com1 gene	Loftis et al. 2006	n.a.
Crimean Congo Haemorrhagic Fever virus (CCHFV)	S segment	Liu et al. 2015	n.a.
Cytomegalovirus (CMV)	UL83 gene	Boppana et al. 2005	FTD Neuro 9 §
Dengue virus (DENV)	C terminal - 3'UTR	Drosten et al. 2002	FTD Tropical fever core §
<i>Ehrlichia spp.</i>	16S rRNA	In house*	n.a.
Enterovirus (EV)	5'-UTR	Kilpatrick et al. 2009	FTD Neuro 9 §
Epstein-Barr virus (EBV)	LMP2a gene	Venter et al. 2014	FTD Neuro 9 §
Flavivirus Genus	Non-structural protein 5	Patel et al. 2013	n.a.
Hepatitis-A virus (HAV)	5'UTR	Costafreda et al. 2006	n.a.
Hepatitis-B virus (HBV)	S-protein	Kodani et al. 2014	FG15
Herpes simplex virus -2 (HSV-2)	Glycoprotein D	Venter et al. 2014	FTD Neuro 9 §
Herpes simplex virus-1 (HSV-1)	Glycoprotein D	Venter et al. 2014	FTD Neuro 9 §
JC-virus (JCV)	T-antigen	Venter et al. 2014	n.a.
<i>Leptospira spp.</i>	Flagellin FlaB gene	Liu et al. 2015 and Stoddard et al. 2000	FTD Tropical fever core
Measles virus (MEV)	H-gene	Venter et al. 2014	n.a.
Mumps virus (MUV)	Nucleocapsid	Venter et al. 2014	n.a.
<i>Mycobacterium tuberculosis</i>	IS6110	Venter et al. 2014	FTD Tropical fever core §
<i>Neisseria meningitidis</i>	CTRa-gene	Venter et al. 2014	n.a.
<i>Plasmodium falciparum</i>	pARC178 gene	Liu et al. 2015 and Kamua et al. 2011	FTD Tropical fever core §
Rabies virus (RABV)	Nucleoprotein	Wacharapluesadee et al. 2012	n.a.
<i>Rickettsia spp.</i>	OMP _a gene	Kato et al. 2013	FTD Tropical fever core §
Rift Valley Fever virus (RVFV)	M segment	Bird et al. 2007	n.a.
Rubella virus (RUBV)	Non-structural protein	Venter et al. 2014	n.a.
Sindbis virus (SINV)	Structural protein E2	van Niekerk et al. 2015	n.a.
Varicella Zoster virus (VZV)	ORF29	Venter et al. 2014	FTD Neuro 9 §
West Nile virus (WNV)	5' UTR-capsid junction	Linke et al. 2007	FTD Tropical fever core §

§ Siemens Healthcare, Berlin, Germany

* Forward primer: GGGACTACGGTCGCAAGACTAA, Reverse primer: CATGCTCCACCGCTTGTG and probe: ACTCAAAGGAATTGACG

Supplemental Table 2. Blood results of pathogens with less than 10 positive detections on the fever chip by country and case control.

The Fever chip columns include the number of participants tested, the number of positive detections and the detection rate (%). The "Confirmation PCR" columns are based only on participants who tested positive on the fever chip; for these we report in the denominator the number tested by PCR, in the numerator the number of confirmed positive and the confirmation rate.

Pathogen	Fever chip						Confirmation PCR					
	BF		CI		SA		BF		CI		SA	
	AFDUC	Control	AFDUC	Control	AFDUC	Control	AFDUC	Control	AFDUC	Control	AFDUC	Control
<i>Brucella</i> spp. [§]	-	-	1/2494 (0.0%)	-	-	-	-	-	-	-	-	-
<i>Coxiella burnetti</i> [§]	1/1146 (0.1%)	-	-	-	-	-	-	-	-	-	-	-
CCHFV	-	-	1/2494 (0.0%)	-	-	-	-	-	-	-	-	-
CMV	2/1146 (0.2%)	1/447 (0.2%)	1/2494 (0.0%)	-	3/889 (0.3%)	-	0/2 (0.0%)	0/1 (0.0%)	-	-	3/3 (100.0%)	-
Flavivirus genus I	12/1146 (1.0%)	-	5/2494 (0.2%)	-	1/889 (0.1%)	-	-	-	-	-	0/1 (0.0%)	-
HSV 1	-	-	2/2494 (0.1%)	-	1/889 (0.1%)	-	-	-	1/2 (50.0%)	-	1/1 (100.0%)	-
HSV 2	3/1146 (0.3%)	1/447 (0.2%)	1/2494 (0.0%)	-	1/889 (0.1%)	-	0/3 (0.0%)	0/1 (0.0%)	0/1 (0.0%)	-	0/1 (0.0%)	-
JCV	-	-	1/2494 (0.0%)	-	1/889 (0.1%)	-	-	-	-	-	1/1 (100.0%)	-
<i>Leptospira</i> spp.	-	7/447 (1.6%)	-	-	4/889 (0.4%)	-	-	0/7 (0.0%)	-	-	0/3 (0.0%)	-
RABV [§]	2/1146 (0.2%)	1/447 (0.2%)	1/2494 (0.0%)	-	-	-	-	-	-	-	-	-
RVFV	-	-	-	-	-	1/411 (0.2%)	-	-	-	-	-	0/1 (0.0%)
RUBV [§]	2/1146 (0.2%)	-	-	-	-	-	-	-	-	-	-	-
VZV	2/1146 (0.2%)	-	-	-	-	-	1/2 (50.0%)	-	-	-	-	-
WNV	-	-	-	-	1/889 (0.1%)	-	-	-	-	-	0/1 (0.0%)	-

[§] No confirmation PCR was performed for the target.

Supplemental Table 3. Detection rates (%) in blood in AFDUC cases and controls, adjusted odds ratios (aOR) with 95% Confidence Intervals (95% CI) and p-values stratified by country and age group.

Detection rates were calculated using the final result and taking the ratio of number of positives over number of tested. Pathogens included are AdV, EV, EBV, HBV and *P. falciparum*. In BF the number of samples tested varies by pathogen due to inconclusive test results. Multivariable logistic regression was performed separately by age group, with AFDUC/Control status as the outcome and pathogen detection as the exposure. Models were adjusted for hospital location, residence (excluded in SA due to high collinearity with hospital location), HIV status, year of enrolment, month of enrolment, exposure to domestic or wild animal. In BF and CI models were adjusted for detection of other pathogens (EBV, HBV, *P. falciparum*) when enough data for these pathogens was available and in SA models are adjusted for the pathogens EBV, EV and AdV when possible. Logistic regression results are only available for those strata with enough data. Data with missing age group (BF: 3 controls, CI: 1 case, SA: 1 case) are excluded from this analysis.

Pathogen	Age group	BF				CI				SA			
		AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value
AdV	<1	0/78 (0.0%)	0/120 (0.0%)	-	-	0/132 (0.0%)	0/50 (0.0%)	-	-	2/178 (1.1%)	0/67 (0.0%)	-	-
AdV	1-4	0/231 (0.0%)	0/111 (0.0%)	-	-	0/532 (0.0%)	0/42 (0.0%)	-	-	3/405 (0.7%)	1/69 (1.4%)	0.2 (0-5.4)	0.35
AdV	5-17	0/155 (0.0%)	0/59 (0.0%)	-	-	0/424 (0.0%)	0/41 (0.0%)	-	-	1/105 (1.0%)	1/66 (1.5%)	0.3 (0-7.1)	0.44
AdV	18-44	1/313 (0.3%)	0/97 (0.0%)	-	-	1/1014 (0.1%)	0/92 (0.0%)	-	-	0/151 (0.0%)	0/173 (0.0%)	-	-
AdV	45+	0/175 (0.0%)	0/56 (0.0%)	-	-	1/391 (0.3%)	0/84 (0.0%)	-	-	0/49 (0.0%)	0/36 (0.0%)	-	-
EV	<1	0/86 (0.0%)	2/120 (1.7%)	-	-	4/132 (3.0%)	0/50 (0.0%)	-	-	0/178 (0.0%)	0/67 (0.0%)	-	-
EV	1-4	2/269 (0.7%)	1/112 (0.9%)	-	-	4/532 (0.8%)	0/42 (0.0%)	-	-	7/405 (1.7%)	2/69 (2.9%)	0.1 (0-1)	<0.05
EV	5-17	0/179 (0.0%)	0/59 (0.0%)	-	-	1/424 (0.2%)	0/41 (0.0%)	-	-	1/105 (1.0%)	0/66 (0.0%)	-	-
EV	18-44	1/374 (0.3%)	0/97 (0.0%)	-	-	1/1014 (0.1%)	0/92 (0.0%)	-	-	0/151 (0.0%)	0/173 (0.0%)	-	-
EV	45+	0/238 (0.0%)	0/56 (0.0%)	-	-	1/391 (0.3%)	0/84 (0.0%)	-	-	0/49 (0.0%)	0/36 (0.0%)	-	-
EBV	<1	1/79 (1.3%)	5.3/120 (4.4%)	-	-	2/132 (1.5%)	0/50 (0.0%)	-	-	14/178 (7.9%)	2/67 (3.0%)	0.4 (0-5.3)	0.51
EBV	1-4	28.1/247 (11.4%)	8/111 (7.2%)	0.5 (0-8.6)	0.64	16/532 (3.0%)	0.6/42 (1.4%)	-	-	76/405 (18.8%)	8/69 (11.6%)	2 (0.6-6.1)	0.23
EBV	5-17	12/162 (7.4%)	1.5/59 (2.5%)	0.4 (0-14.3)	0.62	3/424 (0.7%)	0/41 (0.0%)	-	-	13.6/105 (13.0%)	3/66 (4.5%)	2.9 (0.4-20.9)	0.28
EBV	18-44	12.1/339 (3.6%)	6.6/97 (6.8%)	1.1 (0.2-6.6)	0.88	16.2/1014 (1.6%)	0/92 (0.0%)	-	-	23.8/151 (15.8%)	5/173 (2.9%)	4.4 (1.2-15.8)	<0.05
EBV	45+	5/181 (2.8%)	4/56 (7.1%)	-	-	8.7/391 (2.2%)	1/84 (1.2%)	0.5 (0-12.1)	0.66	8.6/49 (17.6%)	1/36 (2.8%)	-	-
HBV	<1	2/86 (2.3%)	2.1/120 (1.8%)	-	-	0.2/132 (0.2%)	0/50 (0.0%)	-	-	0/178 (0.0%)	0/67 (0.0%)	-	-
HBV	1-4	5/250 (2.0%)	0/112 (0.0%)	-	-	5.1/532 (1.0%)	0/42 (0.0%)	-	-	0/405 (0.0%)	0/69 (0.0%)	-	-

Pathogen	Age group	BF				CI				SA			
		AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value
HBV	5-17	3/167 (1.8%)	3.2/59 (5.4%)	0.2 (0.5-2)	0.3	8/424 (1.9%)	1/41 (2.4%)	0.4 (0-8.5)	0.52	0/105 (0.0%)	0/66 (0.0%)	-	-
HBV	18-44	25.1/369 (6.8%)	2.6/97 (2.7%)	2.6 (0.5-15.1)	0.28	24/1014 (2.4%)	1/92 (1.1%)	2.1 (0.2-20)	0.53	1/151 (0.7%)	1/173 (0.6%)	-	-
HBV	45+	14/234 (6.0%)	3/56 (5.4%)	-	-	8.7/391 (2.2%)	1.1/84 (1.3%)	-	-	1/49 (2.0%)	0/36 (0.0%)	-	-
<i>P. falciparum</i>	<1	6/82 (7.3%)	7/120 (5.8%)	-	-	16/132 (12.1%)	0/50 (0.0%)	-	-	0/178 (0.0%)	0/67 (0.0%)	-	-
<i>P. falciparum</i>	1-4	80/204 (39.2%)	18/111 (16.2%)	6.7 (1.6-27.2)	<0.05	120/532 (22.6%)	3/42 (7.1%)	-	-	0/405 (0.0%)	0/69 (0.0%)	-	-
<i>P. falciparum</i>	5-17	42/138 (30.4%)	14/59 (23.7%)	2.1 (0.4-10.1)	0.36	103/424 (24.3%)	4/41 (9.8%)	13.1 (1.5-116.7)	<0.05	0/105 (0.0%)	0/66 (0.0%)	-	-
<i>P. falciparum</i>	18-44	95/347 (27.4%)	33/97 (34.0%)	1.2 (0.5-2.9)	0.65	198/1014 (19.5%)	3/92 (3.3%)	7.6 (2.1-26.8)	<0.05	0/151 (0.0%)	0/173 (0.0%)	-	-
<i>P. falciparum</i>	45+	41/209 (19.6%)	13/56 (23.2%)	-	-	86/391 (22.0%)	7/84 (8.3%)	4.5 (1.5-13.7)	<0.05	0/49 (0.0%)	0/36 (0.0%)	-	-

Supplemental Table 4. Detection rates (%) in blood in AFDUC cases and controls, adjusted odds ratios (aOR) with 95% Confidence Intervals (95% CI) and p-values stratified by country and residence.

Detection rates were calculated using the final result and taking the ratio of number of positives over number of tested. Pathogens included are AdV, EV, EBV, HBV and *P. falciparum*. In BF the number of samples tested varies by pathogen due to inconclusive test results. Multivariable logistic regression was performed separately by residence, with AFDUC/Control status as the outcome and pathogen detection as the exposure. Models were adjusted for age group, hospital location (excluded in SA, due to almost identical information as residence), HIV status, year of enrolment, month of enrolment, exposure to domestic or wild animal. In BF and CI models were adjusted for detection of other pathogens (EBV, HBV, *P. falciparum*) when enough data for these pathogens was available and in SA models are adjusted for the pathogens EBV, EV and AdV when possible. Logistic regression results are only available for those strata with enough data. Data with missing residence (BF: 6 cases and 4 controls, SA: 8 cases and 4 controls) were excluded from this analysis.

Pathogen	Place of residence	BF				CI				SA			
		AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value
AdV	City	0/359 (0.0%)	0/186 (0.0%)	-	-	2/1622 (0.1%)	0/196 (0.0%)	-	-	5/574 (0.9%)	0/195 (0.0%)	-	-
AdV	Village	1/587 (0.2%)	0/256 (0.0%)	-	-	0/872 (0.0%)	0/113 (0.0%)	-	-	1/307 (0.3%)	2/212 (0.9%)	0.1 (0-3)	0.19
EV	City	0/445 (0.0%)	0/187 (0.0%)	-	-	10/1622 (0.6%)	0/196 (0.0%)	-	-	6/574 (1.0%)	1/195 (0.5%)	0.1 (0-2.8)	0.17
EV	Village	3/695 (0.4%)	3/256 (1.2%)	-	-	1/872 (0.1%)	0/113 (0.0%)	-	-	2/307 (0.7%)	1/212 (0.5%)	0.2 (0-3.9)	0.31
EBV	City	17/367 (4.6%)	6.2/186 (3.3%)	1.7 (0.1-34.2)	0.74	27.6/1622 (1.7%)	1/196 (0.5%)	-	-	73.1/574 (12.7%)	12/195 (6.2%)	0.9 (0.3-2.7)	0.85
EBV	Village	41.2/636 (6.5%)	18.2/256 (7.1%)	0.6 (0.2-1.6)	0.31	18.3/872 (2.1%)	0.6/113 (0.5%)	-	-	60.9/307 (19.8%)	6/212 (2.8%)	5.8 (2-16.9)	<0.05
HBV	City	11/426 (2.6%)	4.3/187 (2.3%)	0 (0-0.5)	<0.05	24.5/1622 (1.5%)	0.4/196 (0.2%)	-	-	1/574 (0.2%)	0/195 (0.0%)	-	-
HBV	Village	37.1/674 (5.5%)	6.6/256 (2.6%)	2.5 (0.8-8.2)	0.12	21.5/872 (2.5%)	2.7/113 (2.4%)	0.3 (0-2)	0.21	1/307 (0.3%)	1/212 (0.5%)	-	-
<i>P. falciparum</i>	City	43/373 (11.5%)	19/186 (10.2%)	6.7 (1.3-33.1)	<0.05	302/1622 (18.6%)	7/196 (3.6%)	8 (2.8-23.2)	<0.001	0/574 (0.0%)	0/195 (0.0%)	-	-
<i>P. falciparum</i>	Village	219/602 (36.4%)	65/256 (25.4%)	2.3 (1.3-3.8)	<0.05	221/872 (25.3%)	10/113 (8.8%)	5.9 (2.3-15.5)	<0.001	0/307 (0.0%)	0/212 (0.0%)	-	-

Supplemental Table 5. Detection rates (%) in blood in AFDUC cases and controls, adjusted odds ratios (aOR) with 95% Confidence Intervals (95% CI) and p-values stratified by country and year of enrolment.

Detection rates were calculated using the final result and taking the ratio of number of positives over number of tested. Analysis was restricted to years in which both cases and controls were enrolled. Pathogens included are AdV, EV, EBV, HBV and *P. falciparum*. In BF the number of samples tested varies by pathogen due to inconclusive test results. Multivariable logistic regression was performed separately by year of enrolment, with AFDUC/Control status as the outcome and pathogen detection as the exposure. Models were adjusted for hospital location, residence (excluded in SA due to high collinearity with hospital location), HIV status, month of enrolment, exposure to domestic or wild animal. In BF and CI models were adjusted for detection of other pathogens (EBV, HBV, *P. falciparum*) when enough data for these pathogens was available and in SA models are adjusted for the pathogens EBV, EV and AdV when possible. Logistic regression results are only available for those strata with enough data.

Pathogen	Year of enrolment	BF				CI				SA			
		AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value
AdV	2018	0/142 (0.0%)	-	-	-	0/567 (0.0%)	-	-	-	2/134 (1.5%)	-	-	-
AdV	2019	0/273 (0.0%)	-	-	-	1/946 (0.1%)	-	-	-	3/334 (0.9%)	1/34 (2.9%)	-	-
AdV	2020	0/367 (0.0%)	0/42 (0.0%)	-	-	1/981 (0.1%)	0/201 (0.0%)	-	-	0/180 (0.0%)	0/36 (0.0%)	-	-
AdV	2021	1/170 (0.6%)	0/270 (0.0%)	-	-	-	0/108 (0.0%)	-	-	1/218 (0.5%)	1/229 (0.4%)	0.5 (0-9)	0.62
AdV	2022	-	0/134 (0.0%)	-	-	-	-	-	-	0/23 (0.0%)	0/112 (0.0%)	-	-
EV	2018	0/142 (0.0%)	-	-	-	7/567 (1.2%)	-	-	-	2/134 (1.5%)	-	-	-
EV	2019	1/273 (0.4%)	-	-	-	3/946 (0.3%)	-	-	-	2/334 (0.6%)	0/34 (0.0%)	-	-
EV	2020	1/406 (0.2%)	0/42 (0.0%)	-	-	1/981 (0.1%)	0/201 (0.0%)	-	-	4/180 (2.2%)	1/36 (2.8%)	0.9 (0.1-15.1)	0.93
EV	2021	1/325 (0.3%)	2/271 (0.7%)	-	-	-	0/108 (0.0%)	-	-	0/218 (0.0%)	0/229 (0.0%)	-	-
EV	2022	-	1/134 (0.7%)	-	-	-	-	-	-	0/23 (0.0%)	1/112 (0.9%)	-	-
EBV	2018	0/142 (0.0%)	-	-	-	15.7/567 (2.8%)	-	-	-	15/134 (11.2%)	-	-	-
EBV	2019	0/273 (0.0%)	-	-	-	17.4/946 (1.8%)	-	-	-	77.8/334 (23.3%)	4/34 (11.8%)	-	-
EBV	2020	46.2/395 (11.7%)	1.1/42 (2.6%)	1.6 (0.1-25.3)	0.74	12.8/981 (1.3%)	1.6/201 (0.8%)	1.4 (0.2-12.2)	0.74	29.3/180 (16.3%)	1/36 (2.8%)	13.9 (1.4-134.6)	<0.05
EBV	2021	12/198 (6.1%)	22.2/270 (8.2%)	0.3 (0.1-0.8)	<0.05	-	0/108 (0.0%)	-	-	10.9/218 (5.0%)	7/229 (3.1%)	3.3 (0.9-12.1)	0.08
EBV	2022	-	2.1/134 (1.6%)	-	-	-	-	-	-	3/23 (13.0%)	7/112 (6.2%)	2.5 (0.3-20.2)	0.4
HBV	2018	5/142 (3.5%)	-	-	-	11.9/567 (2.1%)	-	-	-	1/134 (0.7%)	-	-	-
HBV	2019	4/273 (1.5%)	-	-	-	19.1/946 (2.0%)	-	-	-	0/334 (0.0%)	0/34 (0.0%)	-	-

Pathogen	Year of enrolment	BF				CI				SA			
		AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value
HBV	2020	13/366 (3.6%)	2.6/42 (6.2%)	0.7 (0.1-3.9)	0.67	15/981 (1.5%)	2.7/201 (1.3%)	0.8 (0.2-3.5)	0.74	1/180 (0.6%)	0/36 (0.0%)	-	-
HBV	2021	27.1/325 (8.3%)	8.2/271 (3.0%)	2.5 (0.8-7.4)	0.1	-	0.4/108 (0.4%)	-	-	0/218 (0.0%)	0/229 (0.0%)	-	-
HBV	2022	-	0.1/134 (0.1%)	-	-	-	-	-	-	0/23 (0.0%)	1/112 (0.9%)	-	-
<i>P. falciparum</i>	2018	22/142 (15.5%)	-	-	-	87/567 (15.3%)	-	-	-	0/134 (0.0%)	-	-	-
<i>P. falciparum</i>	2019	29/273 (10.6%)	-	-	-	188/946 (19.9%)	-	-	-	0/334 (0.0%)	0/34 (0.0%)	-	-
<i>P. falciparum</i>	2020	118/318 (37.1%)	13/42 (31.0%)	1.1 (0.4-2.5)	0.91	248/981 (25.3%)	10/201 (5.0%)	6.5 (3.3-13)	<0.001	0/180 (0.0%)	0/36 (0.0%)	-	-
<i>P. falciparum</i>	2021	95/247 (38.5%)	57/270 (21.1%)	2.2 (1.2-3.9)	<0.05	-	7/108 (6.5%)	-	-	0/218 (0.0%)	0/229 (0.0%)	-	-
<i>P. falciparum</i>	2022	-	15/134 (11.2%)	-	-	-	-	-	-	0/23 (0.0%)	0/112 (0.0%)	-	-

Supplemental Table 6. Detection rates (%) in blood in AFDUC cases and controls ≥ 18 years old, adjusted odds ratios (aOR) with 95% Confidence Intervals (95% CI) and p-values stratified by country and HIV status.

Detection rates were calculated using the final result and taking the ratio of number of positives over number of tested. Pathogens included are AdV, EV, EBV, HBV and *P. falciparum*. In BF the number of samples tested varies by pathogen due to inconclusive test results. Analysis was restricted to cases and controls aged 18 years or older, as HIV status was not relevant for participants under 18 years of age (Supplemental Figure 3). Multivariable logistic regression was performed separately by HIV status, with AFDUC/Control status as the outcome and pathogen detection as the exposure. Models were adjusted for hospital location, residence (excluded in SA due to high collinearity with hospital location), year of enrolment, month of enrolment, exposure to domestic or wild animal. In BF and CI models were adjusted for detection of other pathogens (EBV, HBV, *P. falciparum*) when enough data for these pathogens was available and in SA models are adjusted for the pathogens EBV, EV and AdV when possible. Logistic regression results are only available for those strata with enough data. Data with missing HIV status (BF: 6 cases and 4 controls, SA: 8 cases and 4 controls) were excluded from this analysis.

Pathogen	HIV status	BF				CI				SA			
		AFDUC ≥ 18	Control ≥ 18	aOR (95% CI)	p-value	AFDUC ≥ 18	Control ≥ 18	aOR (95% CI)	p-value	AFDUC ≥ 18	Control ≥ 18	aOR (95% CI)	p-value
AdV	Positive	0/36 (0.0%)	0/30 (0.0%)	-	-	0/42 (0.0%)	0/1 (0.0%)	-	-	0/122 (0.0%)	0/48 (0.0%)	-	-
AdV	Negative /Unknown	1/916 (0.1%)	0/416 (0.0%)	-	-	2/2452 (0.1%)	0/308 (0.0%)	-	-	6/767 (0.8%)	2/363 (0.6%)	0.5 (0.1-4.1)	0.52
EV	Positive	0/46 (0.0%)	0/30 (0.0%)	-	-	1/42 (2.4%)	0/1 (0.0%)	-	-	0/122 (0.0%)	0/48 (0.0%)	-	-
EV	Negative /Unknown	3/1100 (0.3%)	3/417 (0.7%)	-	-	10/2452 (0.4%)	0/308 (0.0%)	-	-	8/767 (1.0%)	2/363 (0.6%)	0.2 (0-1.5)	0.12
EBV	Positive	0/37 (0.0%)	1.5/30 (5.0%)	-	-	5.5/42 (13.1%)	0/1 (0.0%)	-	-	27.9/122 (22.9%)	3/48 (6.2%)	2.7 (0.5-14.9)	0.26
EBV	Negative /Unknown	58.2/971 (6.0%)	23.9/416 (5.7%)	0.5 (0.1-1.6)	0.23	40.4/2452 (1.6%)	1.6/308 (0.5%)	-	-	108.1/767 (14.1%)	16/363 (4.4%)	2.4 (1.1-5.1)	<0.05
HBV	Positive	5/46 (10.9%)	0/30 (0.0%)	-	-	4.4/42 (10.5%)	0/1 (0.0%)	-	-	1/122 (0.8%)	1/48 (2.1%)	-	-
HBV	Negative /Unknown	44.1/1060 (4.2%)	10.9/417 (2.6%)	1.2 (0.4-3.8)	0.73	41.6/2452 (1.7%)	3.1/308 (1.0%)	-	-	1/767 (0.1%)	0/363 (0.0%)	-	-
<i>P. falciparum</i>	Positive	3/42 (7.1%)	4/30 (13.3%)	-	-	9/42 (21.4%)	0/1 (0.0%)	-	-	0/122 (0.0%)	0/48 (0.0%)	-	-
<i>P. falciparum</i>	Negative /Unknown	261/938 (27.8%)	81/416 (19.5%)	1.7 (0.8-3.4)	0.16	514/2452 (21.0%)	17/308 (5.5%)	-	-	0/767 (0.0%)	0/363 (0.0%)	-	-

Supplemental Table 7. Detection rates (%) in blood in AFDUC cases and controls, adjusted odds ratios (aOR) with 95% Confidence Intervals (95% CI) and p-values stratified by country and hospitalization status.

Detection rates were calculated using the final result and taking the ratio of number of positives over number of tested. Pathogens included are AdV, EV, EBV, HBV and *P. falciparum*. In BF the number of samples tested varies by pathogen due to inconclusive test results. Stratification by hospitalization status was applied only to cases; the control group consistently includes all controls. Accordingly, multivariable logistic regression was performed separately by hospitalization status, comparing each subset of cases (hospitalized or non-hospitalized) to the full control group. The outcome variable was AFDUC/control status, with pathogen detection as the exposure. Models were adjusted for hospital location, residence (excluded in SA due to high collinearity with hospital location), year of enrolment, month of enrolment, exposure to domestic or wild animal. In BF and CI models were adjusted for detection of other pathogens (EBV, HBV, *P. falciparum*) when enough data for these pathogens was available and in SA models are adjusted for the pathogens EBV, EV and AdV when possible. Logistic regression results are only available for those strata with enough data. Data with missing hospitalisation status (BF: 1 case, SA: 1 case) were excluded from this analysis. Requires hospitalisation refers to AFDUC cases who require hospitalisation or have been hospitalised. Controls are not stratified by this category, i.e. each group of cases is always compared to all controls.

Pathogen	Requires hospitalization	BF				CI				SA			
		AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value
AdV	Yes	0/732 (0.0%)	0/446 (0.0%)	-	-	0/490 (0.0%)	0/309 (0.0%)	-	-	6/864 (0.7%)	2/411 (0.5%)	0.4 (0-3.4)	0.4
AdV	No	1/219 (0.5%)	0/446 (0.0%)	-	-	2/2004 (0.1%)	0/309 (0.0%)	-	-	0/24 (0.0%)	2/411 (0.5%)	-	-
EV	Yes	1/890 (0.1%)	3/447 (0.7%)	-	-	4/490 (0.8%)	0/309 (0.0%)	-	-	8/864 (0.9%)	2/411 (0.5%)	0.2 (0-1.4)	0.11
EV	No	2/255 (0.8%)	3/447 (0.7%)	-	-	7/2004 (0.3%)	0/309 (0.0%)	-	-	0/24 (0.0%)	2/411 (0.5%)	-	-
EBV	Yes	45.2/753 (6.0%)	25.4/446 (5.7%)	0.9 (0.2-5)	0.88	16.3/490 (3.3%)	1.6/309 (0.5%)	-	-	134/864 (15.5%)	19/411 (4.6%)	2.4 (1.2-5)	<0.05
EBV	No	13/254 (5.1%)	25.4/446 (5.7%)	0.4 (0.1-1.2)	0.09	29.6/2004 (1.5%)	1.6/309 (0.5%)	1.3 (0.1-11.2)	0.83	2/24 (8.3%)	19/411 (4.6%)	-	-
HBV	Yes	25/850 (2.9%)	10.9/447 (2.4%)	0.3 (0.1-1.5)	0.15	14/490 (2.9%)	3.1/309 (1.0%)	-	-	2/864 (0.2%)	1/411 (0.2%)	-	-
HBV	No	24.1/255 (9.5%)	10.9/447 (2.4%)	2.1 (0.7-6.4)	0.21	32/2004 (1.6%)	3.1/309 (1.0%)	0.7 (0.1-3)	0.59	0/24 (0.0%)	1/411 (0.2%)	-	-
<i>P. falciparum</i>	Yes	148/724 (20.4%)	85/446 (19.1%)	1.1 (0.5-2.1)	0.85	114/490 (23.3%)	17/309 (5.5%)	17.9 (5.3-60.4)	<0.001	0/864 (0.0%)	0/411 (0.0%)	-	-
<i>P. falciparum</i>	No	116/255 (45.5%)	85/446 (19.1%)	2.4 (1.3-4.5)	<0.05	409/2004 (20.4%)	17/309 (5.5%)	6.2 (3.1-12.4)	<0.001	0/24 (0.0%)	0/411 (0.0%)	-	-

Supplemental Table 8. Detection rates (%) in blood in AFDUC cases and controls, adjusted odds ratios (aOR) with 95% Confidence Intervals (95% CI) and p-values by country restricted to months and years with both case and control enrolment.

Detection rates were calculated using the final result and taking the ratio of number of positives over number of tested. Pathogens included are AdV, EV, EBV, HBV and *P. falciparum*. In BF the number of samples tested varies by pathogen due to inconclusive test results. This analysis is restricted to a subset of cases and controls from those months where both cases and controls were enrolled. Multivariable logistic regression was performed with AFDUC/Control status as the outcome and pathogen detection as the exposure. Models were adjusted for hospital location, residence (excluded in SA due to high collinearity with hospital location), HIV status, month of enrolment, exposure to domestic or wild animal. excluded in SA due to high collinearity with hospital location. Logistic regression results are only available for those strata with enough data.

Pathogen	BF				CI				SA			
	AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value
AdV	1/410 (0.2%)	0/311 (0.0%)	-	-	1/889 (0.1%)	0/201 (0.0%)	-	-	1/409 (0.2%)	2/405 (0.5%)	0.3 (0-3.5)	0.33
EV	2/590 (0.3%)	2/312 (0.6%)	-	-	1/889 (0.1%)	0/201 (0.0%)	-	-	4/409 (1.0%)	2/405 (0.5%)	0.3 (0-2.4)	0.27
EBV	52.2/452 (11.5%)	23.3/311 (7.5%)	0.6 (0.2-1.3)	0.2	11.3/889 (1.3%)	1.6/201 (0.8%)	1.4 (0.2-12.3)	0.75	51.2/409 (12.5%)	19/405 (4.7%)	2.5 (1.2-5)	<0.05
HBV	36.1/551 (6.6%)	10.8/312 (3.5%)	1.7 (0.7-4.4)	0.25	9/889 (1.0%)	2.7/201 (1.3%)	0.8 (0.2-3.5)	0.75	1/409 (0.2%)	1/405 (0.2%)	-	-
<i>P. falciparum</i>	152/424 (35.8%)	70/311 (22.5%)	1.8 (1.1-2.8)	<0.05	228/889 (25.6%)	10/201 (5.0%)	6.4 (3.2-12.8)	<0.001	0/409 (0.0%)	0/405 (0.0%)	-	-

Supplemental Table 9. Detection rates (%) in blood in AFDUC cases and controls, adjusted odds ratios (aOR) with 95% Confidence Intervals (95% CI) and p-values by country excluding AFDUC cases with a positive malaria rapid or smear test without documented antimalarial treatment.

Detection rates were calculated using the final result and taking the ratio of number of positives over number of tested. Pathogens included are EBV, HBV and *P. falciparum*. In BF the number of samples tested varies by pathogen due to inconclusive test results. This analysis is performed for BF and CI as SA did not have any malaria cases. The number of excluded cases due to the criterion mentioned above are 20 in BF and 104. Multivariable logistic regression was performed with AFDUC/Control status as the outcome and pathogen detection as the exposure. Models were adjusted for hospital location, residence, HIV status, month of enrolment, exposure to domestic or wild animal. Models were adjusted for the other pathogens EBV, HBV and *P. falciparum* when enough data for these pathogens was available. Logistic regression results are only available for those strata with enough data.

Pathogen	BF				CI			
	AFDUC	Control	aOR (95% CI)	p-value	AFDUC	Control	aOR (95% CI)	p-value
EBV	57.2/988 (5.8%)	25.4/446 (5.7%)	0.5 (0.2-1.3)	0.17	44.8/2390 (1.9%)	1.6/309 (0.5%)	1.4 (0.2-12.2)	0.79
HBV	49.1/1086 (4.5%)	10.9/447 (2.4%)	1.8 (0.7-4.7)	0.21	41.9/2390 (1.8%)	3.1/309 (1.0%)	0.6 (0.1-2.7)	0.47
<i>P. falciparum</i>	256/960 (26.7%)	85/446 (19.1%)	2 (1.3-3.2)	<0.05	504/2390 (21.1%)	17/309 (5.5%)	6.5 (3.3-13.1)	<0.001

Supplemental Table 10. Additional socio-demographic characteristics of the ANDEMIA study participants overall and by country.

Denominators are given by AFDUC cases and controls who fulfilled the case and control definitions respectively and were tested with the fever chip on blood or CSF. P-values are calculated based on the "Total" column, assessing statistically significant differences in characteristics between the AFDUC and Control group. The Mann-Whitney U test is used for continuous variables, and the Chi-squared test (or Fisher's exact test when needed) is used for categorical variables.

Characteristic	Burkina Faso		Côte d'Ivoire		South Africa		Total		p-value
	Cases AFDUC N = 1164	Controls N = 447	Cases AFDUC N = 2494	Controls N = 309	Cases AFDUC N = 991	Controls N = 411	Cases AFDUC N = 4649	Controls N = 1167	
Education									
No education	716 (61.5%)	274 (61.3%)	1270 (50.9%)	168 (54.4%)	14 (1.4%)	6 (1.5%)	2000 (43.0%)	448 (38.4%)	<0.001
≤ 6 years	257 (22.1%)	80 (17.9%)	427 (17.1%)	58 (18.8%)	41 (4.1%)	22 (5.4%)	725 (15.6%)	160 (13.7%)	
7-10 years	125 (10.7%)	61 (13.6%)	348 (14.0%)	52 (16.8%)	236 (23.8%)	89 (21.7%)	709 (15.3%)	202 (17.3%)	
>10 years	61 (5.2%)	31 (6.9%)	449 (18.0%)	31 (10.0%)	692 (69.8%)	293 (71.3%)	1202 (25.9%)	355 (30.4%)	
Missing	5 (0.4%)	1 (0.2%)	0 (0.0%)	0 (0.0%)	8 (0.8%)	1 (0.2%)	13 (0.3%)	2 (0.2%)	
Current occupation									
Self-employed	669 (57.5%)	192 (43.0%)	898 (36.0%)	153 (49.5%)	31 (3.1%)	14 (3.4%)	1598 (34.4%)	359 (30.8%)	0.001
Full-time employment	138 (11.9%)	26 (5.8%)	369 (14.8%)	47 (15.2%)	242 (24.4%)	88 (21.4%)	749 (16.1%)	161 (13.8%)	
Part-time employment	49 (4.2%)	11 (2.5%)	71 (2.8%)	10 (3.2%)	64 (6.5%)	31 (7.5%)	184 (4.0%)	52 (4.5%)	
Unemployed	247 (21.2%)	206 (46.1%)	1126 (45.1%)	99 (32.0%)	636 (64.2%)	273 (66.4%)	2009 (43.2%)	578 (49.5%)	
Missing	61 (5.2%)	12 (2.7%)	30 (1.2%)	0 (0.0%)	18 (1.8%)	5 (1.2%)	109 (2.3%)	17 (1.5%)	
Smoking									
Yes	44 (3.8%)	6 (1.3%)	84 (3.4%)	11 (3.6%)	33 (3.3%)	49 (11.9%)	161 (3.5%)	66 (5.7%)	<0.001
No	1115 (95.8%)	437 (97.8%)	2410 (96.6%)	298 (96.4%)	904 (91.2%)	341 (83.0%)	4429 (95.3%)	1076 (92.2%)	
Missing	5 (0.4%)	4 (0.9%)	0 (0.0%)	0 (0.0%)	54 (5.4%)	21 (5.1%)	59 (1.3%)	25 (2.1%)	
Crowding index									
Median (IQR)	3.0 (2.0-4.0)	3.0 (2.0-4.0)	2.5 (2.0-3.3)	2.5 (2.0-3.5)	2.0 (1.5-3.0)	2.0 (1.3-2.3)	2.5 (2.0-3.5)	2.3 (1.7-3.0)	<0.001
Consumption of dairy products									
Yes	508 (43.6%)	255 (57.0%)	894 (35.8%)	77 (24.9%)	512 (51.7%)	175 (42.6%)	1914 (41.2%)	507 (43.4%)	0.169
No	656 (56.4%)	192 (43.0%)	1600 (64.2%)	232 (75.1%)	479 (48.3%)	236 (57.4%)	2735 (58.8%)	660 (56.6%)	
Consumption of eggs									
Yes	485 (41.7%)	220 (49.2%)	1017 (40.8%)	105 (34.0%)	508 (51.3%)	225 (54.7%)	2010 (43.2%)	550 (47.1%)	0.018

	Burkina Faso		Côte d'Ivoire		South Africa		Total		
Characteristic	Cases AFDUC N = 1164	Controls N = 447	Cases AFDUC N = 2494	Controls N = 309	Cases AFDUC N = 991	Controls N = 411	Cases AFDUC N = 4649	Controls N = 1167	p-value
No	679 (58.3%)	227 (50.8%)	1477 (59.2%)	204 (66.0%)	483 (48.7%)	186 (45.3%)	2639 (56.8%)	617 (52.9%)	
Consumption of charcuterie									
Yes	451 (38.7%)	160 (35.8%)	417 (16.7%)	24 (7.8%)	243 (24.5%)	97 (23.6%)	1111 (23.9%)	281 (24.1%)	0.927
No	713 (61.3%)	287 (64.2%)	2077 (83.3%)	285 (92.2%)	748 (75.5%)	314 (76.4%)	3538 (76.1%)	886 (75.9%)	
Consumption of food not listed									
Yes	493 (42.4%)	149 (33.3%)	1091 (43.7%)	183 (59.2%)	283 (28.6%)	127 (30.9%)	1867 (40.2%)	459 (39.3%)	0.629
No	671 (57.6%)	298 (66.7%)	1403 (56.3%)	126 (40.8%)	708 (71.4%)	284 (69.1%)	2782 (59.8%)	708 (60.7%)	
Travel international									
Yes	17 (1.5%)	3 (0.7%)	29 (1.2%)	2 (0.6%)	3 (0.3%)	2 (0.5%)	49 (1.1%)	7 (0.6%)	0.289
No	1143 (98.2%)	441 (98.7%)	2463 (98.8%)	307 (99.4%)	987 (99.6%)	409 (99.5%)	4593 (98.8%)	1157 (99.1%)	
Unknown	0 (0.0%)	0 (0.0%)	2 (0.1%)	0 (0.0%)	1 (0.1%)	0 (0.0%)	3 (0.1%)	0 (0.0%)	
Missing	4 (0.3%)	3 (0.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (0.1%)	3 (0.3%)	
Travel domestic									
Yes	57 (4.9%)	16 (3.6%)	350 (14.0%)	38 (12.3%)	95 (9.6%)	30 (7.3%)	502 (10.8%)	84 (7.2%)	<0.001
No	1104 (94.8%)	429 (96.0%)	2140 (85.8%)	271 (87.7%)	892 (90.0%)	381 (92.7%)	4136 (89.0%)	1081 (92.6%)	
Unknown	0 (0.0%)	0 (0.0%)	4 (0.2%)	0 (0.0%)	1 (0.1%)	0 (0.0%)	5 (0.1%)	0 (0.0%)	
Missing	3 (0.3%)	2 (0.4%)	0 (0.0%)	0 (0.0%)	3 (0.3%)	0 (0.0%)	6 (0.1%)	2 (0.2%)	
Tuberculosis status									
Positive	2 (0.2%)	0 (0.0%)	4 (0.2%)	0 (0.0%)	11 (1.1%)	0 (0.0%)	17 (0.4%)	0 (0.0%)	0.086
Negative	1 (0.1%)	0 (0.0%)	9 (0.4%)	6 (1.9%)	44 (4.4%)	6 (1.5%)	54 (1.2%)	12 (1.0%)	
Unknown	1161 (99.7%)	447 (100.0%)	2481 (99.5%)	303 (98.1%)	936 (94.5%)	405 (98.5%)	4578 (98.5%)	1155 (99.0%)	
Reported a previous antibiotic use^a									
Yes	731 (62.8%)	4 (0.9%)	216 (8.7%)	3 (1.0%)	604 (60.9%)	0 (0.0%)	1551 (33.4%)	7 (0.6%)	<0.001
No	429 (36.9%)	440 (98.4%)	2278 (91.3%)	306 (99.0%)	380 (38.3%)	401 (97.6%)	3087 (66.4%)	1147 (98.3%)	
Missing	4 (0.3%)	3 (0.7%)	0 (0.0%)	0 (0.0%)	7 (0.7%)	10 (2.4%)	11 (0.2%)	13 (1.1%)	
Chronic respiratory illness									

	Burkina Faso		Côte d'Ivoire		South Africa		Total		
Characteristic	Cases AFDUC N = 1164	Controls N = 447	Cases AFDUC N = 2494	Controls N = 309	Cases AFDUC N = 991	Controls N = 411	Cases AFDUC N = 4649	Controls N = 1167	p-value
Yes	1 (0.1%)	0 (0.0%)	5 (0.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6 (0.1%)	0 (0.0%)	0.607
No	1150 (98.8%)	445 (99.6%)	2476 (99.3%)	309 (100.0%)	964 (97.3%)	407 (99.0%)	4590 (98.7%)	1161 (99.5%)	
Missing	13 (1.1%)	2 (0.4%)	13 (0.5%)	0 (0.0%)	27 (2.7%)	4 (1.0%)	53 (1.1%)	6 (0.5%)	
Asthma									
Yes	0 (0.0%)	2 (0.4%)	24 (1.0%)	2 (0.6%)	7 (0.7%)	1 (0.2%)	31 (0.7%)	5 (0.4%)	0.463
No	1151 (98.9%)	444 (99.3%)	2462 (98.7%)	307 (99.4%)	959 (96.8%)	407 (99.0%)	4572 (98.3%)	1158 (99.2%)	
Missing	13 (1.1%)	1 (0.2%)	8 (0.3%)	0 (0.0%)	25 (2.5%)	3 (0.7%)	46 (1.0%)	4 (0.3%)	
Diabetes									
Yes	27 (2.3%)	2 (0.4%)	28 (1.1%)	12 (3.9%)	5 (0.5%)	4 (1.0%)	60 (1.3%)	18 (1.5%)	0.621
No	1122 (96.4%)	444 (99.3%)	2452 (98.3%)	297 (96.1%)	960 (96.9%)	404 (98.3%)	4534 (97.5%)	1145 (98.1%)	
Missing	15 (1.3%)	1 (0.2%)	14 (0.6%)	0 (0.0%)	26 (2.6%)	3 (0.7%)	55 (1.2%)	4 (0.3%)	
Chronic heart disease									
Yes	29 (2.5%)	4 (0.9%)	32 (1.3%)	4 (1.3%)	3 (0.3%)	0 (0.0%)	64 (1.4%)	8 (0.7%)	0.074
No	1123 (96.5%)	442 (98.9%)	2447 (98.1%)	305 (98.7%)	961 (97.0%)	408 (99.3%)	4531 (97.5%)	1155 (99.0%)	
Missing	12 (1.0%)	1 (0.2%)	15 (0.6%)	0 (0.0%)	27 (2.7%)	3 (0.7%)	54 (1.2%)	4 (0.3%)	
Chronic kidney disease									
Yes	2 (0.2%)	0 (0.0%)	2 (0.1%)	1 (0.3%)	2 (0.2%)	0 (0.0%)	6 (0.1%)	1 (0.1%)	1.000
No	1145 (98.4%)	445 (99.6%)	2476 (99.3%)	308 (99.7%)	964 (97.3%)	408 (99.3%)	4585 (98.6%)	1161 (99.5%)	
Missing	17 (1.5%)	2 (0.4%)	16 (0.6%)	0 (0.0%)	25 (2.5%)	3 (0.7%)	58 (1.2%)	5 (0.4%)	
Chronic liver disease									
Yes	3 (0.3%)	7 (1.6%)	1 (0.0%)	1 (0.3%)	4 (0.4%)	0 (0.0%)	8 (0.2%)	8 (0.7%)	0.007
No	1145 (98.4%)	439 (98.2%)	2476 (99.3%)	308 (99.7%)	962 (97.1%)	408 (99.3%)	4583 (98.6%)	1155 (99.0%)	
Missing	16 (1.4%)	1 (0.2%)	17 (0.7%)	0 (0.0%)	25 (2.5%)	3 (0.7%)	58 (1.2%)	4 (0.3%)	
Chronic neurological illness									
Yes	3 (0.3%)	0 (0.0%)	4 (0.2%)	0 (0.0%)	4 (0.4%)	0 (0.0%)	11 (0.2%)	0 (0.0%)	0.136
No	1147 (98.5%)	446 (99.8%)	2475 (99.2%)	309 (100.0%)	961 (97.0%)	408 (99.3%)	4583 (98.6%)	1163 (99.7%)	

	Burkina Faso		Côte d'Ivoire		South Africa		Total		
Characteristic	Cases AFDUC N = 1164	Controls N = 447	Cases AFDUC N = 2494	Controls N = 309	Cases AFDUC N = 991	Controls N = 411	Cases AFDUC N = 4649	Controls N = 1167	p-value
Missing	14 (1.2%)	1 (0.2%)	15 (0.6%)	0 (0.0%)	26 (2.6%)	3 (0.7%)	55 (1.2%)	4 (0.3%)	
Chronic blood disorders									
Yes	10 (0.9%)	1 (0.2%)	11 (0.4%)	2 (0.6%)	1 (0.1%)	0 (0.0%)	22 (0.5%)	3 (0.3%)	0.437
No	1135 (97.5%)	445 (99.6%)	2466 (98.9%)	307 (99.4%)	962 (97.1%)	408 (99.3%)	4563 (98.2%)	1160 (99.4%)	
Missing	19 (1.6%)	1 (0.2%)	17 (0.7%)	0 (0.0%)	28 (2.8%)	3 (0.7%)	64 (1.4%)	4 (0.3%)	
Other comorbidities									
Yes	12 (1.0%)	5 (1.1%)	47 (1.9%)	47 (15.2%)	60 (6.1%)	7 (1.7%)	119 (2.6%)	59 (5.1%)	<0.001
No	1111 (95.4%)	439 (98.2%)	2432 (97.5%)	262 (84.8%)	908 (91.6%)	401 (97.6%)	4451 (95.7%)	1102 (94.4%)	
Missing	41 (3.5%)	3 (0.7%)	15 (0.6%)	0 (0.0%)	23 (2.3%)	3 (0.7%)	79 (1.7%)	6 (0.5%)	
<i>Among those ever being vaccinated</i>									
Documented receipt of Polio-containing vaccine									
Yes	241 (88.3%)	115 (95.0%)	167 (45.0%)	27 (47.4%)	409 (77.0%)	69 (63.9%)	817 (69.5%)	211 (73.8%)	0.216
No	30 (11.0%)	6 (5.0%)	129 (34.8%)	24 (42.1%)	0 (0.0%)	1 (0.9%)	159 (13.5%)	31 (10.8%)	
Missing	2 (0.7%)	0 (0.0%)	75 (20.2%)	6 (10.5%)	122 (23.0%)	38 (35.2%)	199 (16.9%)	44 (15.4%)	
Documented receipt of Rubella-containing vaccine									
Yes	64 (23.4%)	27 (22.3%)	21 (5.7%)	3 (5.3%)	1 (0.2%)	7 (6.5%)	86 (7.3%)	37 (12.9%)	0.258
No	202 (74.0%)	93 (76.9%)	220 (59.3%)	40 (70.2%)	29 (5.5%)	15 (13.9%)	451 (38.4%)	148 (51.7%)	
Missing	7 (2.6%)	1 (0.8%)	130 (35.0%)	14 (24.6%)	501 (94.4%)	86 (79.6%)	638 (54.3%)	101 (35.3%)	
Documented receipt of meningococcal vaccine									
Yes	87 (31.9%)	23 (19.0%)	68 (18.3%)	9 (15.8%)	2 (0.4%)	2 (1.9%)	157 (13.4%)	34 (11.9%)	0.013
No	178 (65.2%)	96 (79.3%)	185 (49.9%)	35 (61.4%)	28 (5.3%)	15 (13.9%)	391 (33.3%)	146 (51.0%)	
Missing	8 (2.9%)	2 (1.7%)	118 (31.8%)	13 (22.8%)	501 (94.4%)	91 (84.3%)	627 (53.4%)	106 (37.1%)	
Documented receipt of Yellow fever vaccine									
Yes	161 (59.0%)	39 (32.2%)	223 (60.1%)	20 (35.1%)	1 (0.2%)	0 (0.0%)	385 (32.8%)	59 (20.6%)	<0.001
No	109 (39.9%)	82 (67.8%)	98 (26.4%)	26 (45.6%)	29 (5.5%)	15 (13.9%)	236 (20.1%)	123 (43.0%)	

	Burkina Faso		Côte d'Ivoire		South Africa		Total		
Characteristic	Cases AFDUC N = 1164	Controls N = 447	Cases AFDUC N = 2494	Controls N = 309	Cases AFDUC N = 991	Controls N = 411	Cases AFDUC N = 4649	Controls N = 1167	p-value
Missing	3 (1.1%)	0 (0.0%)	50 (13.5%)	11 (19.3%)	501 (94.4%)	93 (86.1%)	554 (47.1%)	104 (36.4%)	
Pregnancy^b									
Yes	7 (1.2%)	0 (0.0%)	18 (1.2%)	0 (0.0%)	1 (0.4%)	0 (0.0%)	26 (1.1%)	0 (0.0%)	0.009
No	250 (42.2%)	72 (41.9%)	825 (56.7%)	78 (47.9%)	135 (54.2%)	118 (49.6%)	1210 (52.7%)	268 (46.8%)	
Missing	335 (56.6%)	100 (58.1%)	611 (42.0%)	85 (52.1%)	113 (45.4%)	120 (50.4%)	1059 (46.1%)	305 (53.2%)	
Nutrition until 6 months old^c									
Exclusive breastfeeding	30 (71.4%)	56 (70.0%)	30 (51.7%)	21 (70.0%)	96 (71.1%)	15 (31.2%)	156 (66.4%)	92 (58.2%)	0.185
Partial breastfeeding	11 (26.2%)	15 (18.8%)	15 (25.9%)	8 (26.7%)	26 (19.3%)	20 (41.7%)	52 (22.1%)	43 (27.2%)	
No breastfeeding	0 (0.0%)	2 (2.5%)	7 (12.1%)	1 (3.3%)	4 (3.0%)	9 (18.8%)	11 (4.7%)	12 (7.6%)	
Missing	1 (2.4%)	7 (8.8%)	6 (10.3%)	0 (0.0%)	9 (6.7%)	4 (8.3%)	16 (6.8%)	11 (7.0%)	

^a Has the patient taken/is the patient taking antibiotics prior sample collection?

^b Percentages refer only to the total number of women between 10 and 65 years old.

^c Percentages refer only to children not older than 6 months old.

Supplemental Table 11. Symptom frequencies (%) in AFDUC cases overall and by country.

Symptoms are presented from highest to lowest overall frequency.

Characteristic	BF N = 1164	CI N = 2494	SA N = 991	Total N = 4649
Self-reported fever	1113 (95.6%)	2270 (91.0%)	981 (99.0%)	4364 (93.9%)
Fatigue	861 (74.0%)	1803 (72.3%)	656 (66.2%)	3320 (71.4%)
Fever at enrolment	687 (59.0%)	1783 (71.5%)	518 (52.3%)	2988 (64.3%)
Headache	491 (42.2%)	1672 (67.0%)	311 (31.4%)	2474 (53.2%)
Chills	418 (35.9%)	1294 (51.9%)	224 (22.6%)	1936 (41.6%)
Myalgia	508 (43.6%)	1176 (47.2%)	64 (6.5%)	1748 (37.6%)
Diarrhea or other gastrointestinal symptoms	169 (14.5%)	751 (30.1%)	282 (28.5%)	1202 (25.9%)
Weight loss	320 (27.5%)	588 (23.6%)	255 (25.7%)	1163 (25.0%)
Neurological symptoms	223 (19.2%)	107 (4.3%)	774 (78.1%)	1104 (23.7%)
Other symptoms	287 (24.7%)	178 (7.1%)	274 (27.6%)	739 (15.9%)
Respiratory symptoms	37 (3.2%)	411 (16.5%)	286 (28.9%)	734 (15.8%)
Arthralgia	96 (8.2%)	518 (20.8%)	73 (7.4%)	687 (14.8%)
Dermatological symptoms	66 (5.7%)	88 (3.5%)	147 (14.8%)	301 (6.5%)
Lymphadenopathy	20 (1.7%)	71 (2.8%)	19 (1.9%)	110 (2.4%)

Supplemental Table 12. Symptom frequencies (%) in cases by country and hospitalisation status.

Symptoms are presented from highest to lowest overall frequency. One case in BF and one case in SA is excluded due to missing data for hospitalisation.

Characteristic	Requires hospitalisation			Does not require hospitalisation		
	BF (N = 907)	CI (N = 490)	SA (N = 966)	BF (N = 256)	CI (N = 2004)	SA (N = 24)
Self-reported fever	885 (97.6%)	435 (88.8%)	958 (99.2%)	227 (88.7%)	1835 (91.6%)	22 (91.7%)
Fatigue	726 (80.0%)	388 (79.2%)	635 (65.7%)	135 (52.7%)	1415 (70.6%)	20 (83.3%)
Fever at enrolment	452 (49.8%)	398 (81.2%)	509 (52.7%)	234 (91.4%)	1385 (69.1%)	9 (37.5%)
Headache	307 (33.8%)	243 (49.6%)	286 (29.6%)	184 (71.9%)	1429 (71.3%)	24 (100.0%)
Chills	308 (34.0%)	200 (40.8%)	202 (20.9%)	110 (43.0%)	1094 (54.6%)	21 (87.5%)
Myalgia	377 (41.6%)	174 (35.5%)	42 (4.3%)	131 (51.2%)	1002 (50.0%)	21 (87.5%)
Diarrhea or other gastrointestinal symptoms	137 (15.1%)	195 (39.8%)	271 (28.1%)	32 (12.5%)	556 (27.7%)	10 (41.7%)
Weight loss	254 (28.0%)	139 (28.4%)	244 (25.3%)	66 (25.8%)	449 (22.4%)	11 (45.8%)
Neurological symptoms	220 (24.3%)	87 (17.8%)	772 (79.9%)	3 (1.2%)	20 (1.0%)	2 (8.3%)
Other symptoms	251 (27.7%)	59 (12.0%)	272 (28.2%)	36 (14.1%)	119 (5.9%)	2 (8.3%)
Respiratory symptoms	20 (2.2%)	106 (21.6%)	275 (28.5%)	17 (6.6%)	305 (15.2%)	10 (41.7%)
Arthralgia	54 (6.0%)	115 (23.5%)	57 (5.9%)	42 (16.4%)	403 (20.1%)	16 (66.7%)
Dermatological symptoms	58 (6.4%)	22 (4.5%)	143 (14.8%)	8 (3.1%)	66 (3.3%)	4 (16.7%)
Lymphadenopathy	15 (1.7%)	19 (3.9%)	14 (1.4%)	5 (2.0%)	52 (2.6%)	5 (20.8%)

Supplemental Table 13. Neurological symptom frequencies (%) in AFDUC cases by country and hospitalisation status.

Only neurological symptoms are shown and frequencies are computed among all cases including those without neurological symptoms. Data with missing hospitalisation status (BF: 1 case, SA: 1 case) were excluded.

Characteristic	Requires hospitalisation			Does not require hospitalisation		
	BF (N = 907)	CI (N = 490)	SA (N = 966)	BF (N = 256)	CI (N = 2004)	SA (N = 24)
Meningitis	158 (17.4%)	43 (8.8%)	243 (25.2%)	2 (0.8%)	6 (0.3%)	2 (8.3%)
Encephalitis	66 (7.3%)	33 (6.7%)	3 (0.3%)	0 (0.0%)	3 (0.1%)	0 (0.0%)
Paralysis	8 (0.9%)	11 (2.2%)	105 (10.9%)	0 (0.0%)	4 (0.2%)	0 (0.0%)
Seizure/Convulsions	12 (1.3%)	16 (3.3%)	430 (44.5%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Guillain Barré syndrome	1 (0.1%)	1 (0.2%)	1 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Other neurological symptoms	19 (2.1%)	21 (4.3%)	73 (7.6%)	1 (0.4%)	10 (0.5%)	0 (0.0%)

Supplemental Table 14. Proportion of confirmation PCR performed (%) and confirmation rate (%) by pathogen, case/control status and fever chip result.

“Confirmation performed” refers to the number and percentage of participants with a confirmation PCR among those tested positive or inconclusive on the fever chip. “Confirmation rate” is the proportion of positive confirmation PCR results among all confirmation PCRs performed. Values are shown as n/N (percentage).

Pathogen	Fever chip result	AFDUC/Control	BF		CI		SA	
			Confirmation performed	Confirmation rate	Confirmation performed	Confirmation rate	Confirmation performed	Confirmation rate
AdV	Positive	AFDUC	-	-	5/7 (71.4%)	0/5 (0.0%)	15/16 (93.8%)	5/15 (33.3%)
AdV	Positive	Controls	1/1 (100.0%)	0/1 (0.0%)	-	-	2/2 (100.0%)	2/2 (100.0%)
DENV	Positive	AFDUC	17/17 (100.0%)	16/17 (94.1%)	1/5 (20.0%)	1/1 (100.0%)	-	-
EV	Positive	AFDUC	6/6 (100.0%)	3/6 (50.0%)	5/12 (41.7%)	4/5 (80.0%)	9/9 (100.0%)	8/9 (88.9%)
EV	Positive	Controls	4/4 (100.0%)	3/4 (75.0%)	-	-	2/2 (100.0%)	2/2 (100.0%)
EBV	Positive	AFDUC	257/260 (98.8%)	58/257 (22.6%)	55/109 (50.5%)	24/55 (43.6%)	152/162 (93.8%)	128/152 (84.2%)
EBV	Positive	Controls	118/129 (91.5%)	24/118 (20.3%)	1/2 (50.0%)	1/1 (100.0%)	29/29 (100.0%)	19/29 (65.5%)
HAV	Positive	AFDUC	0/7 (0.0%)	-	0/8 (0.0%)	-	2/2 (100.0%)	1/2 (50.0%)
HBV	Positive	AFDUC	101/105 (96.2%)	47/101 (46.5%)	81/93 (87.1%)	40/81 (49.4%)	2/2 (100.0%)	2/2 (100.0%)
HBV	Positive	Controls	20/23 (87.0%)	10/20 (50.0%)	2/5 (40.0%)	2/2 (100.0%)	1/1 (100.0%)	1/1 (100.0%)
<i>M. tuberculosis</i>	Positive	AFDUC	0/16 (0.0%)	-	-	-	-	-
<i>P. falciparum</i>	Positive	AFDUC	38/265 (14.3%)	37/38 (97.4%)	0/523 (0.0%)	-	-	-
<i>P. falciparum</i>	Positive	Controls	1/85 (1.2%)	1/1 (100.0%)	0/17 (0.0%)	-	-	-
AdV	Inconclusive	AFDUC	167/361 (46.3%)	1/167 (0.6%)	-	-	-	-
AdV	Inconclusive	Controls	0/1 (0.0%)	-	-	-	-	-
EBV	Inconclusive	AFDUC	3/141 (2.1%)	0/3 (0.0%)	-	-	-	-
EBV	Inconclusive	Controls	0/1 (0.0%)	-	-	-	-	-
HBV	Inconclusive	AFDUC	0/40 (0.0%)	-	-	-	-	-
<i>P. falciparum</i>	Inconclusive	AFDUC	1/167 (0.6%)	0/1 (0.0%)	-	-	-	-
<i>P. falciparum</i>	Inconclusive	Controls	0/1 (0.0%)	-	-	-	-	-

Supplemental Table 15. CSF biomolecular results in BF and SA cases.

Denominators are given by AFDUC cases who have a final test result on CSF. The computations are based on the final result given by fever chip and confirmation PCR. Due to different test kits used in BF the number of CSF samples tested varies by pathogen.

Pathogen	BF Cases	SA Cases
EBV	4/32 (12.5%)	8/244 (3.3%)
HBV	1/19 (5.3%)	
<i>P. falciparum</i>	1/31 (3.2%)	
AdV		1/244 (0.4%)
CMV		1/244 (0.4%)
EV		2/244 (0.8%)
<i>M. tuberculosis</i>		1/244 (0.4%)

Supplemental Table 16. Comparison of characteristics of AFDUC cases with and without CSF results in BF and SA.

AFDUC cases are stratified into those with blood test result only and those with a CSF result, which includes CSF-only results or both blood and CSF results.

Characteristic	BF Cases		SA Cases	
	CSF results available N = 32	Only blood results available N = 1132	CSF results available N = 244	Only blood results available N = 747
Year of enrolment				
2018	5 (15.6%)	140 (12.4%)	15 (6.1%)	125 (16.7%)
2019	21 (65.6%)	263 (23.2%)	67 (27.5%)	285 (38.2%)
2020	2 (6.2%)	405 (35.8%)	92 (37.7%)	135 (18.1%)
2021	4 (12.5%)	324 (28.6%)	67 (27.5%)	179 (24.0%)
2022	0 (0.0%)	0 (0.0%)	3 (1.2%)	23 (3.1%)
Age group				
<1	5 (15.6%)	84 (7.4%)	66 (27.0%)	136 (18.2%)
1-4	10 (31.2%)	264 (23.3%)	61 (25.0%)	375 (50.2%)
5-17	9 (28.1%)	175 (15.5%)	25 (10.2%)	90 (12.0%)
18-44	4 (12.5%)	373 (33.0%)	62 (25.4%)	113 (15.1%)
45+	4 (12.5%)	236 (20.8%)	28 (11.5%)	33 (4.4%)
Missing	0 (0.0%)	0 (0.0%)	2 (0.8%)	0 (0.0%)
Sex				
Female	14 (43.8%)	508 (44.9%)	121 (49.6%)	316 (42.3%)
Male	18 (56.2%)	622 (54.9%)	122 (50.0%)	427 (57.2%)
Missing	0 (0.0%)	2 (0.2%)	1 (0.4%)	4 (0.5%)
Location of health care facility				
Urban	22 (68.8%)	762 (67.3%)	206 (84.4%)	471 (63.1%)
Rural	10 (31.2%)	370 (32.7%)	38 (15.6%)	276 (36.9%)
Place of residence				
City	12 (37.5%)	440 (38.9%)	202 (82.8%)	466 (62.4%)
Village	20 (62.5%)	686 (60.6%)	41 (16.8%)	274 (36.7%)
Missing	0 (0.0%)	6 (0.5%)	1 (0.4%)	7 (0.9%)
Requires hospitalisation^a				
Yes	31 (96.9%)	876 (77.4%)	244 (100.0%)	722 (96.7%)
No	1 (3.1%)	255 (22.5%)	0 (0.0%)	24 (3.2%)
Missing	0 (0.0%)	1 (0.1%)	0 (0.0%)	1 (0.1%)

^a Does the patient's condition require hospitalisation or has the patient been hospitalised.

Supplemental Table 17. Effect of residence and HIV status on detection rates. Adjusted odds ratios (aOR) with 95% Confidence Intervals (95% CI) and p-values stratified by AFDUC/Control status and country.

Multivariable logistic regression was performed with pathogen detection (positive/negative) as the outcome and either residence or HIV status as exposure. The model with HIV status as the exposure was restricted to data from South Africa. All models were adjusted for age group, sex, year of enrolment, month of enrolment and education. Logistic regression results are only available for those strata with enough data.

Exposure	Outcome	AFDUC/Control	BF		CI		SA	
			aOR (95% CI)	p-value	aOR (95% CI)	p-value	aOR (95% CI)	p-value
Residence (village versus city)	EBV	AFDUC	0.9 (0.4-1.9)	0.73	1 (0.4-2.3)	0.99	1.4 (0.9-2.1)	0.19
	HBV	AFDUC	1.9 (0.9-4.3)	0.1	1.6 (0.8-3.1)	0.17	-	-
	<i>P. falciparum</i>	AFDUC	2.6 (1.7-4)	<0.001	1.4 (1.1-1.7)	<0.05	-	-
	EBV	Control	0.9 (0.2-3.7)	0.88	-	-	0.4 (0.1-1.3)	0.13
	HBV	Control	0.9 (0.1-5.8)	0.93	-	-	-	-
	<i>P. falciparum</i>	Control	3.4 (1.5-7.7)	<0.05	2 (0.5-7.1)	0.31	-	-
HIV status (positive versus negative)	EBV	AFDUC	-	-	-	-	2.6 (1.3-5.2)	<0.05

Supplemental Table 18. Association between malaria RDT results, antimalarial pre-treatment, and Plasmodium falciparum fever chip positivity in Burkina Faso and Côte d'Ivoire. Numbers represent the distribution of fever chip results (positive/negative, n/N and %) stratified by RDT status and reported antimalarial pre-treatment at enrolment. Adjusted odds ratios (aOR) with 95% confidence intervals were estimated using multivariable logistic regression controlling for sex and residence. Reference categories are RDT negative and no pre-treatment.

Variable	Burkina Faso				Côte d'Ivoire			
	Fever chip		aOR [95%CI]	p-value	Fever chip		aOR [95%CI]	p-value
	Positive n/N (%)	Negative n/N (%)			Positive n/N (%)	Negative n/N (%)		
Malaria RDT result								
Positive	14/22 (63.6)	8/22 (36.4)	4.05 [1.65-10.7]	0.002	7 (18.9)	30 (81.1)	0.943 [0.38-2.05]	0.89
Negative	230 (26.6)	634 (73.4)	Ref	-	409 (19.8)	1654 (80.2)	Ref	-
Antimalarial pre-treatment								
Yes	46 (36.2)	81 (63.8)	1.57 [1.03-2.36]	0.03	52 (16.3)	267 (83.7)	0.746 [0.55-0.82]	0.07
No	215 (25.6)	626 (74.4)	Ref	-	466 (21.7)	1685 (78.3)	Ref	-

Supplemental Table 19. Comparison of characteristics of AFDUC cases with and without serology results in BF and CI.

Denominators are given by AFDUC cases who have a fever chip test result on blood or CSF stratified by serological test done.

Characteristic	BF Cases		CI Cases	
	Serology performed N = 593	Serology not performed N = 571	Serology performed N = 1119	Serology not performed N = 1375
Year of enrolment				
2018	100 (16.9%)	45 (7.9%)	172 (15.4%)	395 (28.7%)
2019	129 (21.8%)	155 (27.1%)	395 (35.3%)	551 (40.1%)
2020	140 (23.6%)	267 (46.8%)	552 (49.3%)	429 (31.2%)
2021	224 (37.8%)	104 (18.2%)	0 (0.0%)	0 (0.0%)
Age group				
<1	1 (0.2%)	88 (15.4%)	4 (0.4%)	128 (9.3%)
1-4	8 (1.3%)	266 (46.6%)	10 (0.9%)	522 (38.0%)
5-17	12 (2.0%)	172 (30.1%)	76 (6.8%)	348 (25.3%)
18-44	349 (58.9%)	28 (4.9%)	771 (68.9%)	243 (17.7%)
45+	223 (37.6%)	17 (3.0%)	258 (23.1%)	133 (9.7%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.1%)
Sex				
Female	269 (45.4%)	253 (44.3%)	674 (60.2%)	681 (49.5%)
Male	322 (54.3%)	318 (55.7%)	444 (39.7%)	693 (50.4%)
Missing	2 (0.3%)	0 (0.0%)	1 (0.1%)	1 (0.1%)
Location of health care facility				
Urban	371 (62.6%)	413 (72.3%)	580 (51.8%)	956 (69.5%)
Rural	222 (37.4%)	158 (27.7%)	539 (48.2%)	419 (30.5%)
Place of residence				
City	268 (45.2%)	184 (32.2%)	657 (58.7%)	965 (70.2%)
Village	323 (54.5%)	383 (67.1%)	462 (41.3%)	410 (29.8%)
Missing	2 (0.3%)	4 (0.7%)	0 (0.0%)	0 (0.0%)
Requires hospitalisation^a				
Yes	425 (71.7%)	482 (84.4%)	161 (14.4%)	329 (23.9%)
No	168 (28.3%)	88 (15.4%)	958 (85.6%)	1046 (76.1%)
Missing	0 (0.0%)	1 (0.2%)	0 (0.0%)	0 (0.0%)

^a Does the patient's condition require hospitalisation or has the patient been hospitalised.

Supplemental Table 20. IgM Serology results for BF and CI cases.

Denominators are given by AFDUC cases who have a fever chip test result on blood or CSF and a result from serological testing. The counts shown for 'DENV and CHIKV' refer to individuals who tested positive for both viruses. 'DENV or CHIKV' includes individuals who tested positive for at least one of the two viruses based on serological analysis.

	BF Cases N = 593	CI Cases N = 1119
DENV	120 (20.2%)	247 (22.1%)
CHIKV	117 (19.7%)	236 (21.1%)
DENV and CHIKV	67 (11.3%)	162 (14.5%)
DENV or CHIKV	170 (28.7%)	321 (28.7%)

Supplemental Table 21. Comparison of DENV test results from serology with fever chip + confirmation PCR result on blood by country.

The first column shows the detection rate of DENV on blood based the fever chip and confirmation PCR. The second column shows the detection rate for DENV in blood from fever chip + confirmation PCR among those cases which tested positive for DENV in serology. The last column shows the detection rate for DENV in blood from fever chip + confirmation PCR among those cases which tested negative for DENV in serology. One case with positive DENV serology results from BF does not have a test result on blood by fever chip. Thus, the denominator in the second column for BF is 119 instead of 120 cases tested positive for DENV by serology.

	DENV results in blood from fever chip + confirmation PCR	DENV results in blood from fever chip + confirmation PCR among those positive for DENV by serology	DENV results in blood from fever chip + confirmation PCR among those negative for DENV by serology
BF	16/1146 (1.4%)	7/119 (5.9%)	6/469 (1.3%)
CI	5/2494 (0.2%)	0/247 (0.0%)	4/872 (0.5%)
BF & CI	21/3640 (0.6%)	7/366 (1.9%)	10/1341 (0.7%)