THE LANCET
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Supplementary appendix

Supplementary material to

Clinical characteristics and risk factors of mortality among 11,613 hospitalized children and adolescents with COVID-19: an analysis of a nationwide database
Lancet Child and Adolescent Health

Supplementary material (S.1)
SIVEP-Gripe (The Influenza Epidemiological Surveillance Information System)

The Influenza Epidemiological Surveillance Information System, SIVEP-Gripe (*Sistema de Informação de Vigilância Epidemiológica da Gripe*), was established by the Brazilian Ministry of Health (MS) in 2009, due to the Influenza A (H1N1) pandemic. This system has been maintained since then for the monitoring of severe acute respiratory syndrome (SARS) cases and surveillance of unusual events associated with respiratory infections in the country. Since then, this sentinel surveillance has been expanded for other respiratory viruses. In 2020, the surveillance of COVID-19 was incorporated into the system network. For the purpose of monitoring hospitalized cases of COVID-19, the Ministry of Health incorporated the testing of the SARS-CoV-2 virus to the surveillance of SARS. Case notification is mandatory, and records are stored in the computerized database SIVEP-Gripe.
In 2020, the Ministry of Health released a "Technical Note" with recommendations for the immediate notification of suspected and confirmed cases of COVID-19. It was recommended that outpatients with mild COVID-19 be notified in the e-SUS VE system and those cases hospitalized be reported in the SIVEP-Gripe system (Technical Note available at
https://www.cosemsmg.org.br/site/Arquivos/PDF/nms20.pdf). Consequently, SIVEP-Gripe came to be the single source for all patients admitted to both public and private hospitals with COVID-19 in Brazil. In practical terms, SIVEP-Gripe has been the primary source of information on all COVID-19 hospital admissions and deaths in the country.
To enter the SIVEP-Gripe database, the case must present flu-like syndrome and at least one of the following criteria: dyspnea or respiratory distress or O_2 saturation less than 95% in room air or cyanosis or symptoms specific for children (intercostal retractions, nasal flaring, dehydration, and inappetence). Also, they need to have been admitted to hospital or died without hospital admission.
Detailed information regarding this database, including reporting form and data dictionary, codes, and all de-identified data, such as individual participant data, are publicly available at
https://opendatasus.saude.gov.br/dataset/bd-srag-2020).
We downloaded the original database on January 10, 2021 and, for analysis purposes, the original dataset was saved in Excel, SPSS, and STATA versions. Based on the original reporting form and data dictionary, we recoded the variables using similar approach described by Ranzani et al. in a supplementary material (eTable 3) of the paper "Characterisation of the first 250 000 hospital admissions for COVID-19 in Brazil: a retrospective analysis of nationwide data". Lancet Respir Med 2021. (available at https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30560-9/fulltext#supplementaryMaterial).
In addition, we created variables for the competing-risk survival analyses. For instance, from the fields "date of admission" and "date of discharge or death" we created the variable time_event (in days). In addition, we manually revised the field "morb_desc", an open-ended one, which included some relevant clinical information, especially related with comorbidities and another risk factors (for example, prematurity). From this field, we created the close-ended field Malignancy by manually scrutinizing the field morb_desc. Of 11,613 indexed cases, 1,760 (15%) had some observation included in this field. We performed this task in the SPPS statistical package by using the diverse search mechanisms available. Thus, for instance, for the field Malignancy we searched all 1,760 cases for any oncology issue and found 583 cases of cancer in this sample. As expected, most cases were related with hematological malignancies like leukemia, lymphoma, or CNS tumors.

Supplementary material (S.2)

Sensitivity Analysis

For analysis purposes, in order to evaluate the scope of the sample in SIVEP-Gripe database, we carried on several preliminary analyses with the entire dataset of 11,603 cases < 20 years with laboratory-confirmed COVID-19.

As shown in supplementary material S.1, to enter the SIVEP-Gripe database, the case must present flu-like syndrome and at least one of the following criteria: dyspnea or respiratory distress or O2 saturation less than 95% in room air or cyanosis or symptoms specific for children (intercostal retractions, nasal flaring, dehydration, and inappetence). Also, they need to have been admitted to hospital or died without hospital admission (https://opendatasus.saude.gov.br/dataset/bd-srag-2020).

Of note, our preliminary analysis has shown that only about 47%, 54%, and 41% of the pediatric patients in the sample had respectively dyspnea, respiratory distress, and oxygen saturation <95% at admission (with a significant overlapping between them). As a whole, according to the data available in SIVEP-Gripe database, 7,081 cases (61%) fulfilled the strict criteria for entry in database. In this context, to ascertain the robustness of our analysis further , we created a subset of cases including only those cases who fulfilled the strict criteria to be enrolled in SIVEP-Gripe database. In this subset, 714 (10%) had the primary outcome. Similarly. in this subset we also evaluated the primary outcome by competing risks analysis, using cumulative incidence function (CIF) and Fine and Gray proportional sub-distribution hazards model. Discharge was treated as a competing event. The complete results of sensitivity analysis are presented in supplementary tables (Appendix Tables S.6, Tables S.7, Tables S.8) and in supplementary figures (Figures S.9 and S.10A-D).

It can be observed that these results are very similar to those based on the entire data set of 11603 cases. There are very minor differences in the univariate analysis presented in Table S.5 when compared to Table S.7, for instance, regarding variable "Asian ethnicity" for both competitive outcomes. On the other hand, and more important, multivariate analysis for both datasets are in complete agreement showing the robustness of the results based on the entire dataset. A final issue in this comparison should be highlighted. The analysis based on the entire data set, that is larger than the strict criterion one, is naturally more precise. The smaller length of the confidence intervals is the most notable evidence of this fact.

1,134,873 Entries in SIVEP-Gripe
(from Feb 2020 to Jan 2021)

10,184 caused by other respiratory
viruses (4,241 influenza,
5,943 other respiratory viruses)

1,124,689 cases

< 20 years
82,055 (7·3%)

RT-qPCR for SARS-CoV-2
Negative 49,417

32,638 (39.7%)

RT-qPCR for SARS-CoV-2
Waiting for the result 9,995
Not performed 4,307
Inconclusive 402
Missing 6,321

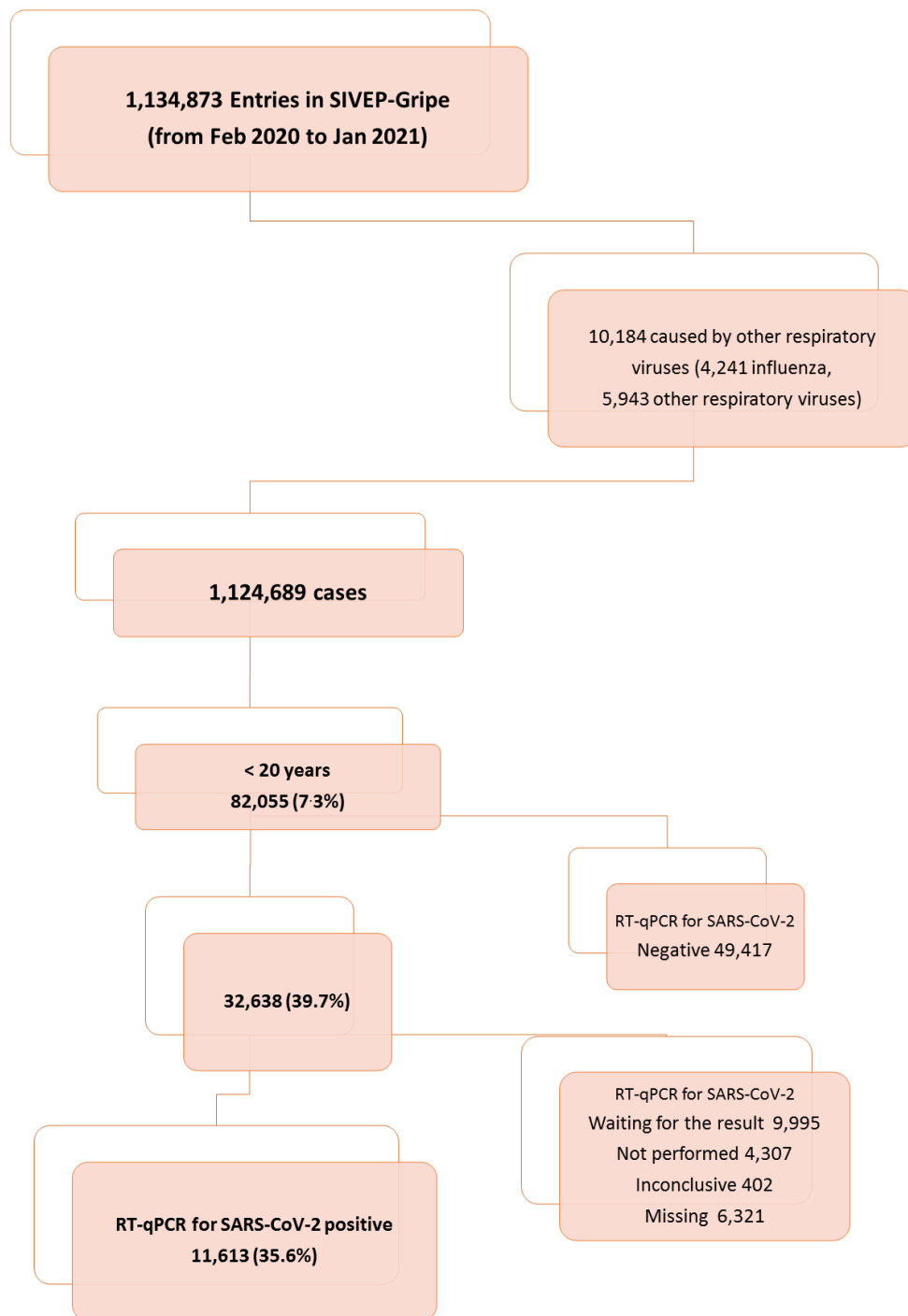**RT-qPCR for SARS-CoV-2 positive**
11,613 (35.6%)

Figure S.3. Flow diagram of sample selection

Table S.4. Demographic and clinical characteristics of children with positive RT-qPCR COVID-19 according to the Brazilian macroregions

	North (%)	Northeast (%)	Central-West (%)	Southeast (%)	South (%)
	1,841	**3,388**	**1,356**	**4,065**	**963**
Cases /million young pop.	330·4	227·0	330·0	210·5	144·5
Age (years)					
Median (IQR)	4·0 (1 – 13·0)	4·2 (0.7 – 13·0)	9·8 (2 – 17·0)	5·3 (1 – 14·0)	5·5 (1 – 15·0)
Mean (SD)	6·9 (6·7)	6·8 (6·2)	9·8 (7·2)	7·5 (6·9)	7·8 (7·2)
Age group (years)					
0 - 1·9	692 (35·6)	1318 (38.9)	337 (24·8)	1375 (33·9)	329 (34·2)
2 – 4·9	294 (16·0)	495 (14.6)	147 (10·8)	607 (14·9)	141 (14·6)
5 – 11·9	353 (19·1)	661 (19·5)	268 (19·7)	830 (20·4)	177 (18·3)
12 – 19·9	502 (27·2)	914 (26·9)	604 (44·5)	1253 (30·8)	316 (32·8)
Gender (n = 11,600)					
Male	953 (51·8)	1807 (53·5)	675 (49·8)	2083 (51·3)	514 (53·4)
Female	888 (48·2)	1570 (46·5)	681(50·20	1980 (40·7)	449 (46·6)
Ethinicity (n = 9,109)					
White	157 (8·9)	343 (13·2)	286 (30·6)	1734 (56·0)	671(82·5)
Black / Brown	1501 (85·3)	2204 (85·4)	619 (66·2)	1326 (42·8)	134 (16·4)
Asian	11 (0·6)	23 (0·89)	15 (1·6)	27 (0·87)	3 (0·37)
Indigenous	90 (5·1)	11 (0·42)	14 (1·49)	7 (0·22)	5 (0·61)
Number of comorbidities					
None	1488 (80·8)	2382 (70·3)	1115 (82·2)	2751 (67·7)	616 (63·4)
1	309 (16·8)	898 (26·5)	211 (15·5)	1088 (26·7)	274 (28·4)
2	39 (2·1)	95 (2·8)	24 (1·8)	191 (4·7)	54 (5·6)
>3	5 (0·3)	13 (0·38)	6 (0·44)	35 (0·86)	19 (2·0)
ICU admission (n = 11,074)					
No	1495 (84·6)	2314 (73·3)	1051 (83·4)	2728 (69·4)	727 (76·0)
Yes	273 (15·4)	843 (26·7)	291 (16·6)	2015 (30·6)	229 (24·0)
Death rate (n = 10,867)					
No	1592 (91·5)	2743 (89·5)	1199 (96·3)	3657 (94·3)	882 (93·5)
Yes	147 (8·5)	320 (10·5)	46 (3·7)	220 (5·7)	61 (6·5)

Data (n) in the first column represent the available data for those variables with missing values (gender, ethnicity, and signs and symptoms at presentation).

For comorbidities, we assumed missing values as the absence of the clinical condition.

Table S5. Univariate survival analysis competitive risk according to the demographic and clinical characteristics of children with positive RT-qPCR COVID-19

	Discharge (%)* 10,410 (92·2)	HR (95% CI)	P-value	Death (%)* 886 (7·8)	HR (95% CI)	P-value
Age (years)						
Median (IQR)	5·2 (1·0 – 14·3)	0·98 (0·98, 0·99)	<0·001	5·5 (0·5 – 15·9)	1·00 (0·99, 1·01)	0·076
Mean (SD)	7.5 (6·8)			8·0 (7·5)		
Age group (years)						
0 - 1·9	3,548 (34·1)	0·86 (0·83;0·90)	<0·001	354 (40·0)	1·88 (1·58; 2·24)	<0·001
2 – 11·9	3,788 (35·5)	1.0		194 (21·9)	1·0	
12 – 19·9	3,164 (30·4)	0.75 (0·72; 0·79)	<0·001	338 (38·1)	1·98 (1·65; 2·36)	<0·001
Gender**						
Male	5,402 (51·9)	1·01 (0·98; 1·05)	0·317	466 (52·7)	1·02 (0·9; 1·16)	0·701
Region						
Southeast	3,756 (36.1)	1.0		236 (26.6)	1.0	
South	887 (8·5)	1.03 (0·95;1·11)	0·463	63 (7·1)	1·11 (0·84; 1·46)	0·450
Central-West	1,283 (12·3)	0.75 (0·71; 0·79)	<0·001	49 (5·5)	0·62 (0·45; 0·84)	0·003
Northeast	2,840 (27·3)	0.68 (0·65; 0·71)	<0·001	377 (42·6)	2·03 (1·72; 2·38)	<0·001
North	1,644 (15·8)	0.83 (0·78; 0·88)	<0·001	161 (18·2)	1·53 (1·25; 1·87)	<0·001
Race#						
White	2,919 (35·8)	1·0		214 (28·9)	1·0	
Black / Brown	5,112 (62·3)	0.85 (0·81; 0·89)	<0·001	493 (66·5)	1·30 (1·11;1·53)	0·001
Asian	70 (0·9)	0.79 (0·62; 0·99)	0·045	8 (1·1)	1·50 (0·75; 3·02)	0·247
Indigenous	100 (1·2)	0.67 (0·54; 0·83)	<0·001	26 (3·5)	3·27 (2·17; 4·93)	<0·001
Signs and symptoms						
Fever	6,984 (75·0)	0.98 (0·94, 1·03)	0·53	559 (73·9)	0·97 (0·82, 1·14)	0·72
Cough	6,206 (68.4)	1.11 (1·06, 1·15)	<0·001	413 (58·8)	0·68 (0·58, 0·79)	<0·001
Odynophagia	1,926 (24·8)	0.97 (0·92, 1·01)	0·22	109 (18·4)	0·69 (0·56, 0·85)	<0·001
Respiratory distress	4,385 (52·3)	0.78 (0·75, 0·81)	< 0·001	564 (75·9)	2·78 (2·35, 3·29)	<0·001
O2 saturation <95%	3,061 (38·1)	0·69 (0·66, 0·72)	< 0·001	504 (70·5)	3·66 (3·11, 4·30)	<0·001
Dyspnea	4,783 (45.9)	0.80 (0·72;0·83)	< 0·001	581 (65.6)	2.65 (2.23;3.14)	<0·001
Anosmia	317 (7·5)	0.97 (0·88, 1·07)	0·60	14 (5·0)	0·65 (0·38, 1·12)	0·12
Ageusia	297 (7·1)	0.99 (0·89, 1·02)	0·25	13 (4·6)	0·64 (0·36, 1·12)	0·12
Diarrhea	1,657 (21.2)	1.03 (0·98, 1·09)	0·14	117 (19·1)	0·88 (0·72, 1·08)	0·23
Vomit	1,821 (23.2)	1.01 (0·96,1·06)	0·57	147 (23·4)	1·00 (0·82, 1·21)	0·95
Abdominal pain	607 (14·0)	0.99 (0·91, 1·07)	0·87	45 (14·7)	1·04 (0·75, 1·43)	0·78
Comorbidity (yes/no)	2,715 (26·1)	0.78 (0·74; 0·81)	<0·001	448 (50·6)	2·26 (1·98; 2·58)	<0·001
Number of comorbidities						
None	7695 (73.9)	1		438 (49·4)	1·0	<0·001
1	2,352 (22.6)	0·77 (0·73,0·81)	<0·001	347 (39·2)	2·42 (2·10, 2·79)	
2	308 (3.0)	0·56 (0·50, 0·63)	<0·001	81 (9·1)	4·11 (3·25, 5·18)	<0·001
≥3	55 (0.5)	0·44 (0·34, 0·56)	<0·001	20 (2·3)	5·48 (3·55, 8·46)	<0·001
Main comorbidities						<0·001
Asthma	823 (7.9)	1·48 (1·38; 1·59)	<0·001	32 (3·6)	0·60 (0·42; 0·85)	<0·001
Pulmonary	204 (2.0)	0·74 (0·65, 0·85)	<0·001	32 (3·6)	1·80 (1·27;2·55)	0·001
Neurology	556 (5.3)	0·61 (0·56, 0·66)	<0·001	125 (14·1)	2·66 (2·20,3·21)	<0·001
Oncology	445 (4.3)	0·57 (0·52,0·63)	<0·001	125 (14·1)	3·22 (2·68, 3·87)	<0·001
Cardiology	276 (2.7)	0·56 (0·50, 0·63)	<0·001	83 (9·4)	3·36 (2·68, 4·20)	<0·001
Hematology	230 (2.2)	0·78 (0·69, 0·88)	<0·001	33 (3·7)	1·66 (1·17, 2·35)	0·004
Renal	131 (1.3)	0·57 (0·48, 0·68)	<0·001	40 (4·5)	3·40 (2·48, 4·66)	<0·001
Diabetes	155 (1.6)	0·76 (0·65, 0·88)	<0·001	33 (3·7)	2·16 (1·53. 3·06)	<0·001
Obesity	134 (1.3)	0·84(0·70, 1·00)	0·051	23 (2·7)	1·93 (1·29, 2·90)	<0·001
Syndrome	95 (0.9)	0·60 (0·52, 0·71)	<0·001	24 (2·7)	3·11 (2·33, 4·15)	<0·001

* 317 missing cases regarding primary outcome ** 13 missing; # 2,432 missing

Table S.6. Demographic and clinical characteristics of children with positive RT-qPCR COVID-19 that fulfilled SIVEP criteria

	Overall (%) 7,081 (100)
Age (years)	
Median (IQR)	4·7 (1 – 13.9)
Mean (SD)	7·3 (6·9)
Age group (years)	
0 - 1·9	2464 (34.8)
2 – 11.9	2526 (35.7)
12 – 19·9	2091 (29.5)
Gender (n = 7,075)	
Male	3311 (46.7)
Female	3764 (53.3)
Region	
Southeast	2553 (36.1)
South	590 (8.3)
Central-West	521 (7.4)
Northeast	2134 (30.1)
North	1283 (18.1)
Ethinicity (n = 5,821)	
White	1912 (32.8)
Black / Brown	3776 (64.9)
Asian	39 (0.66)
Indigenous	94 (1.61)
Signs and symptoms at presentation	
Fever (n= 6,461)	4,846 (75·0)
Cough (n = 6,460)	4,981 (77·1)
Respiratory distress (n = 6,371)	5,056 (79.3)
Oxygen saturation <95% (n = 6,016)	3,685 (61.2)
Dyspneia (n = 6,614)	5,529 (83.6)
Odynophagia (n = 5,370)	1,367 (25·5)
Anosmia (n = 2,890)	213 (7·4)
Ageusia (n = 2,880)	188 (6·5)
Diarrhea (n = 5,435)	993 (18·3)
Vomit (n = 5,480)	1,154 (21·0)
Abdominal pain (n = 3,008)	365 (12·0)
Number of comorbidities	
None	4723 (66.7)
1	1997 (28.2)
2	298 (4.2)
>3	63 (0.9)
Main comorbidities	
Asthma	765 (10.8)
Pulmonary	217 (3·1)
Neurologic	530 (7·3)
Oncologic	581 (5·0)
Cardiopathy	285 (4·0)
Hematological	167 (2·4)
Renal	94 (1·3)
Diabetes	161 (2·3)
Obesity	130 (1·8)
Syndrome/chromosomal abn.	164 (2·3)

Data (n) in the first column represent the available data for those variables with missing values (gender, ethnicity, and signs and symptoms at presentation). For comorbidities, we assumed missing values as the absence of the clinical condition.

Table S.7. Univariate survival analysis competitive risk according to the demographic and clinical characteristics of children with laboratory-confirmed COVID-19 that fulfilled SIVEP criteria

|	Discharge (%)* 6,166 (89.6)	HR (95% CI)	P-value	Death (%)* 714 (10.4)	HR (95% CI)	P-value
Age (years)						
Median (IQR)	5·2 (1·0 – 14·3)	0.993 (0.98, 0.996)	<0·001	5·5 (0·5 – 15·9)	1·01 (1·00, 1·02)	0·005
Mean (SD)	7.5 (6·8)			8·0 (7·5)		
Age group (years)						
0 - 1·9	2,250 (36.5)	0.80 (0.83;0.90)	<0·001	152 (21.3)	1·89 (1·55; 2·30)	<0·001
2 – 11·9	2,148 (34.8)	1.0		285 (39.9)	1·0	
12 – 19·9	1,768 (28.7)	0.75 (0.70; 0.79)	<0·001	227 (38·8)	2·20 (1·81; 2·96)	<0·001
Gender						
Male	3,292 (53.4)	1.01 (0.98; 1.05)	0·317	368 (51·5)	0.93 (0·80; 1·07)	0·33
Region						
Southeast	2,305 (37.4)	1.0		189 (26.5)	1.0	
South	528 (8.6)	0.99 (0.89;1.09)	0·91	53 (7.4)	1·20 (0·89; 1·63)	0·22
Central-West	470 (7.6)	0.87 (0.79; 0.95)	0·003	41 (5.7)	1·05 (0·75; 1·48)	0·73
Northeast	1,741 (28.2)	0.67 (0.63; 0.71)	<0·001	298 (41.7)	1·96 (1·64; 2·36)	<0·001
North	1,122 (18.2)	0.85 (0.79; 0.91)	<0·001	133 (18.6)	1·42 (1·13; 1·77)	0·002
Race#						
White	1,703 (33.6)	1.0		170 (28.3)	1·0	
Black / Brown	3,259 (64.3)	0.86 (0.81; 0.91)	<0·001	401 (66.8)	1·21 (1·01, 1·44)	0·035
Asian	32 (0.6)	0.76 (0.52; 1.10)	0·150	7 (1.2)	2·08 (0·98; 4·42)	0·053
Indigenous	71 (1.4)	0.63 (0.49; 0.80)	<0·001	22 (3.7)	2·85 (1·83; 4·45)	<0.001
Signs and symptoms						
Fever	4,249 (68·9)	0.96 (0.94, 1.04)	0·53	478 (67.0)	1·01 (0·84, 1·21)	0·86
Cough	4,485 (72.7)	0.94 (0.92, 0.98)	0·005	374 (52·4)	0·48 (0·40, 0·57)	<0·001
Odynophagia	1,243 (20·1)	1.06 (1.00, 1.13)	0·04	100 (14·0)	0·72 (0·58, 0·89)	0·004
Respiratory distress	4,385 (71·1)	0.83 (0.78, 0.89)	<0·001	564 (78·9)	1·67 (1·33, 2·09)	<0·001
O2 saturation <95%	3,061 (49.6)	0.69 (0.65, 0.73)	<0·001	504 (70·6)	2·81 (2.30, 3·43)	<0·001
Dyspneia	4,783 (77.6)	0.91 (0.86;0.98)	0.009	581 (81.4)	1.47 (1.16;1.86)	0.001
Anosmia	198 (3·2)	1.06 (0.92, 1.09)	0·32	12 (1·7)	0.66 (0·37, 1·19)	0·17
Ageusia	174 (2·8)	1.07 (0.94, 1.23)	0·28	11 (1·6)	0·69 (0·38, 1·27)	0·23
Diarrhea	880 (14.3)	0.96 (0.89, 1.02)	0·25	97 (13·6)	1·03 (0·82, 1·29)	0·76
Vomit	1,010 (16.4)	0.96 (0.90,1.02)	0·22	116 (16·2)	1·05 (0·86, 1·31)	0·58
Abdominal pain	312 (5·0)	0.90 (0.81, 1.00)	0·07	37 (5·2)	1·26 (0·89, 1·79)	0.18
Comorbidity (yes/no)	2,715 (26·1)	0.78 (0.74; 0.81)	<0·001	448 (50·6)	2·26 (1·98; 2·58)	<0·001
Number of comorbidities						
None	4,256 (69.0)	1		343 (48.0)	1·0	
1	1,648 (26.7)	0.78 (0.74,0.82)	<0·001	283 (39.6)	2·01 (1·72, 2·35)	<0·001
2	220 (3.6)	0.54 (0.47, 0.61)	<0·001	70 (9.8)	3·43 (2·67, 4·41)	<0·001
≥3	42 (0.7)	0.45 (0.34, 0.59)	<0·001	18 (2.5)	4·31 (2·64, 6·80)	<0·001
Main comorbidities						
Asthma	724 (11.7)	1.56 (1.45; 1.69)	<0.001	30 (4.2)	0·34 (0·24; 0·50)	<0·001
Pulmonary	177 (2.9)	0.79 (0.69, 0.91)	<0.001	30 (4.2)	1·40 (0·98;2·01)	0·065
Neurology	404 (6.6)	0.59 (0.54, 0.65)	<0.001	106 (14.8)	2·26 (1·84,2·67)	<0·001
Oncology	445 (4.3)	0.46 (0.40,0.52)	<0.001	125 (14·1)	3·22 (2·68, 3·87)	<0·001
Cardiology	190 (3.1)	0.52 (0.45, 0.59)	<0.001	74 (10·4)	3·36 (2·68, 4·20)	<0·001
Hematology	136 (2.2)	0.74 (0.64, 0.86)	<0·001	26 (3·6)	1·66 (1·17, 2·35)	0·004
Renal	64 (1.0)	0.51 (0.40, 0.65)	<0·001	29 (4·1)	3·40 (2·48, 4·66)	<0·001
Diabetes	122 (2.0)	0.72 (0.61, 0.86)	<0·001	21 (2.9)	2·16 (1·53. 3·06)	<0·001
Obesity	134 (1.3)	0.85 (0.70, 1.03)	0·113	23 (2·7)	1·93 (1·29, 2·90)	<0·001
Syndrome	120 (1.9)	0.62 (0.52, 0.74)	<0·001	40 (5.6)	3·11 (2·33, 4·15)	<0·001
						<0·001

*** 201 missing cases regarding primary outcome, #1,260 missing cases regarding ethnicity**

Table S.8. Multivariate survival analysis competing risk in children with laboratory-confirmed COVID-19 that fulfilled SIVEP criteria

	Discharge (%)* 6,166 (89.6)	HR (95% CI)	P-value	Death (%)* 714 (10.4)	HR (95% CI)	P-value
Age group (years)						
0 - 1·9	2,250 (36.5)	0.76 (0·72;0·81)	<0·001	152 (21.3)	2.31 (1.85; 2.88)	<0·001
2 – 11·9	2,148 (34.8)	1·0		285 (39.9)	1.0	
12 – 19·9	1,768 (28.7)	0.72 (0·67; 0·76)	<0·001	227 (38·8)	2·47 (1·99 3·01)	<0·001
Region						
Southeast	2,305 (37.4)	1·0		189 (26.5)	1.0	
South	528 (8.6)	0·99 (0·88;1·10)	0·86	53 (7.4)	1·24 (0·89; 1·70)	0·177
Central-West	470 (7.6)	0·77 (0·69; 0·86)	<0·001	41 (5.7)	1·25 (0·85; 1·82)	0·241
Northeast	1,741 (28.2)	0·63 (0·58; 0·67)	<0·001	298 (41.7)	2·18 (1·74; 2·73)	<0·001
North	1,122 (18.2)	0·81 (0·75; 0·88)	<0·001	133 (18.6)	1·52 (1·16; 1·97)	0·002
Race#						
White	1,703 (33.6)	1.0		170 (28.3)	1.0	
Black / Brown	3,259 (64.3)	0.95 (0.89; 1.02)	0.171	401 (66.8)	1·08 (0·88;1·34)	0·438
Asian	32 (0.6)	0.82 (0.56; 1.20)	0.324	7 (1.2)	1·97 (0·90; 4·28)	0·086
Indigenous	71 (1.4)	0·63 (0·49; 0·82)	<0·000	22 (3.7)	3·24 (2·02; 5·17)	<0·001
Comorbidities						
None	4,256 (69.0)	1·0		343 (48.0)	1.0	
1	1,648 (26.7)	0·72 (0·67; 0·76)	<0·001	283 (39.6)	2·58 (2.15,3·09)	<0·001
2	220 (3.6)	0·46 (0·40,0·54)	<0·001	70 (9.8)	4·18 (3·13, 5·58)	<0·001
≥3	42 (0.7)	0·36 (0·27,0·49)	<0·001	18 (2.5)	6·31 (3·85, 10·3)	<0·001

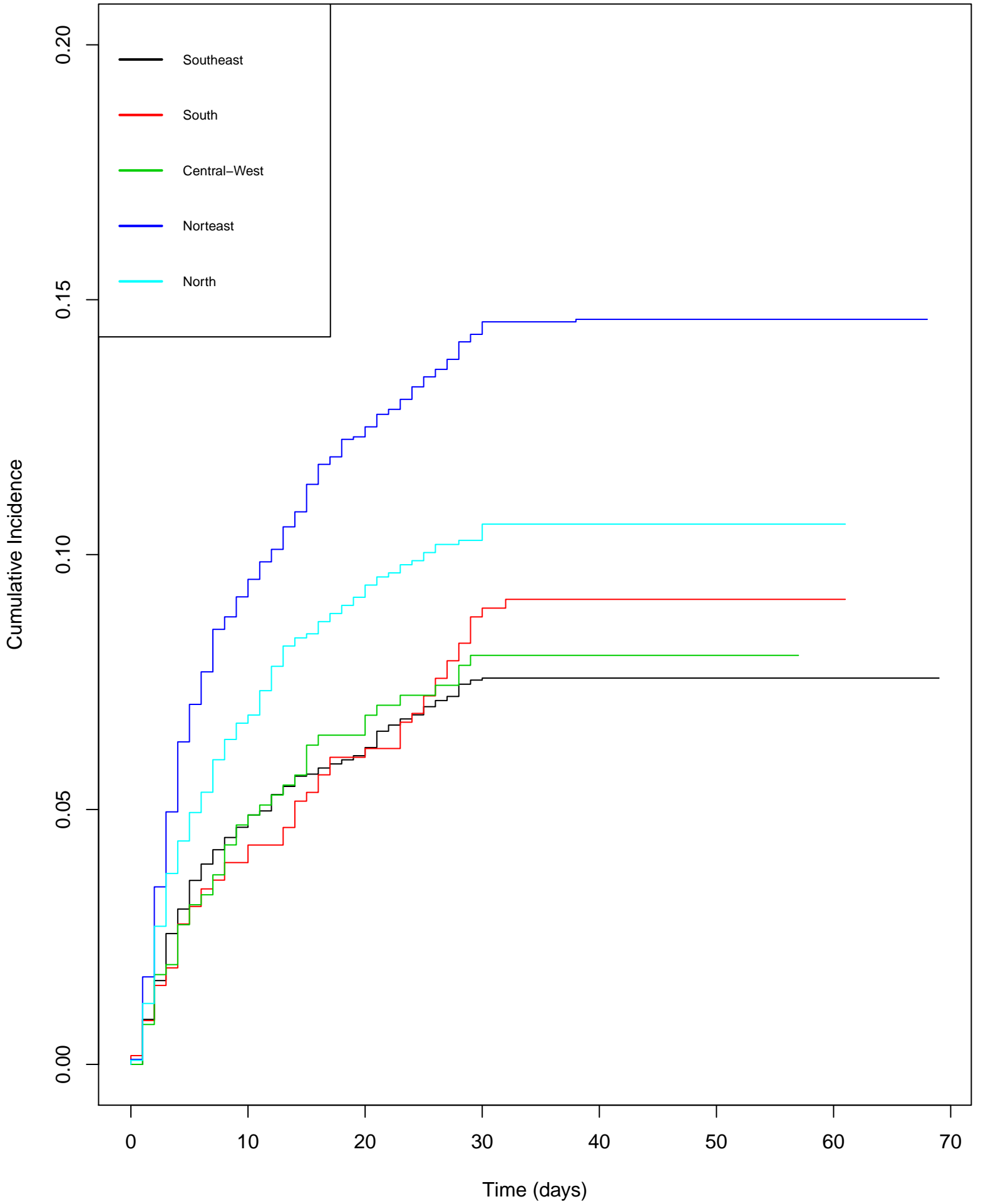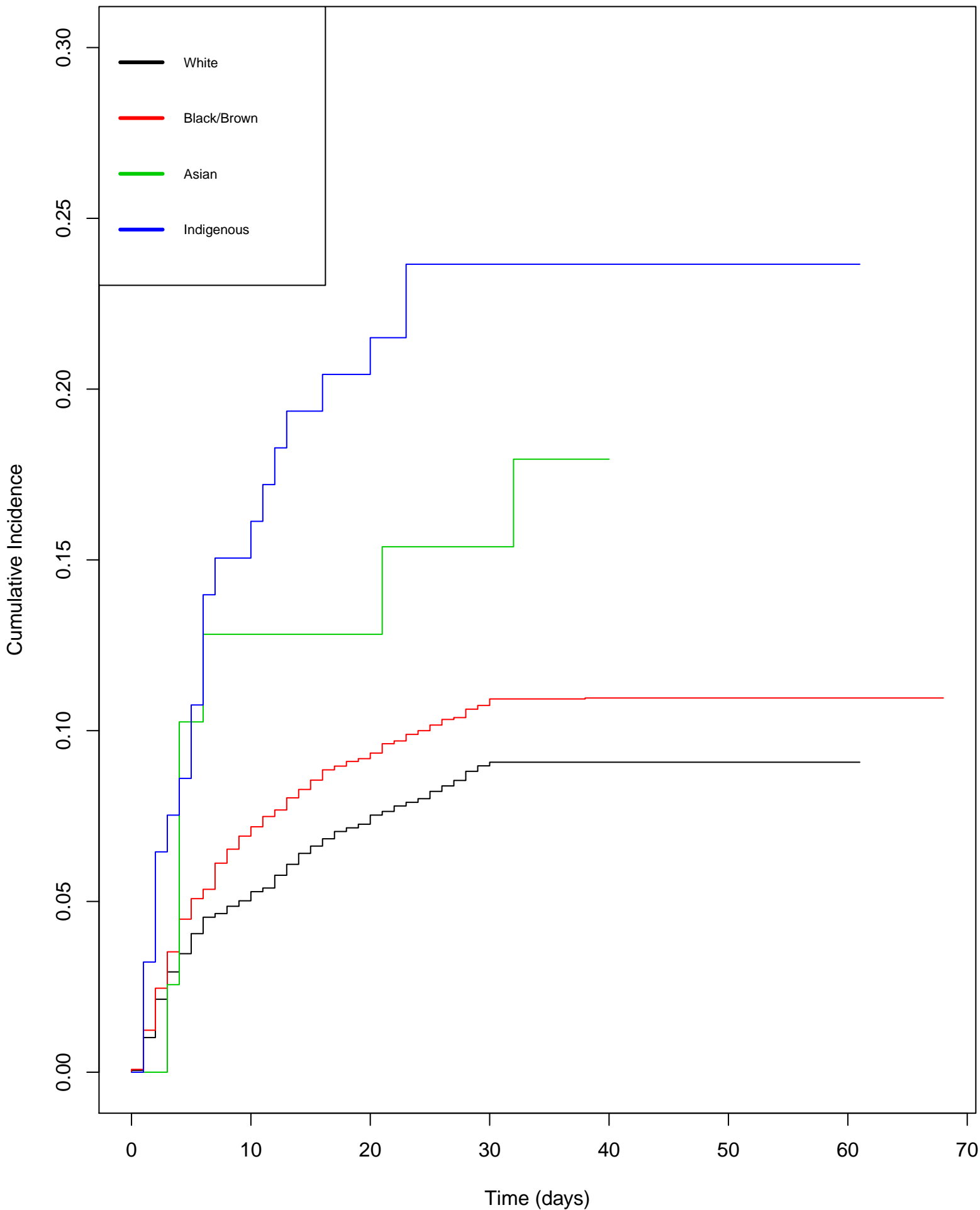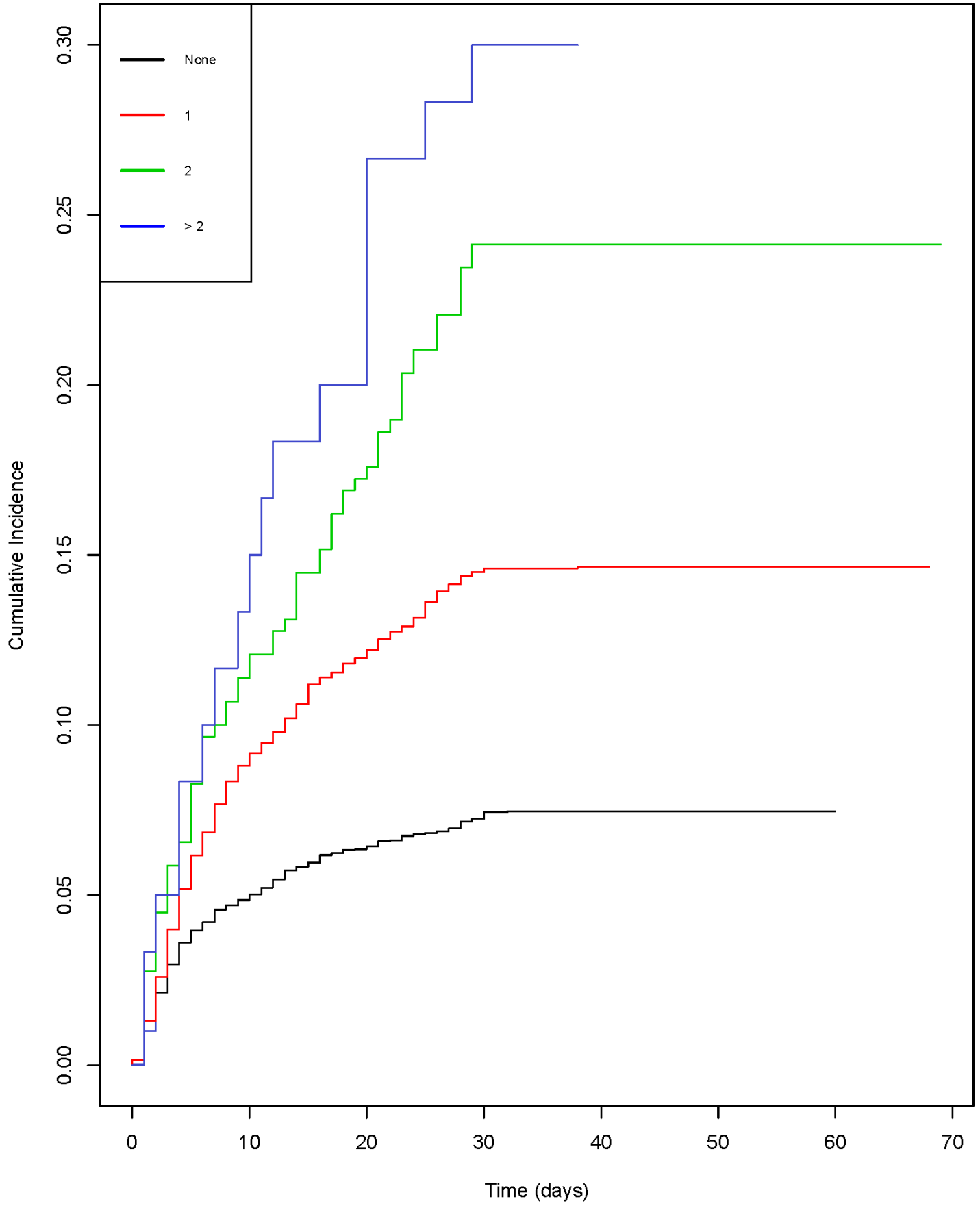*** 201 missing cases regarding primary outcome, #1,260 missing cases regarding ethnicity**

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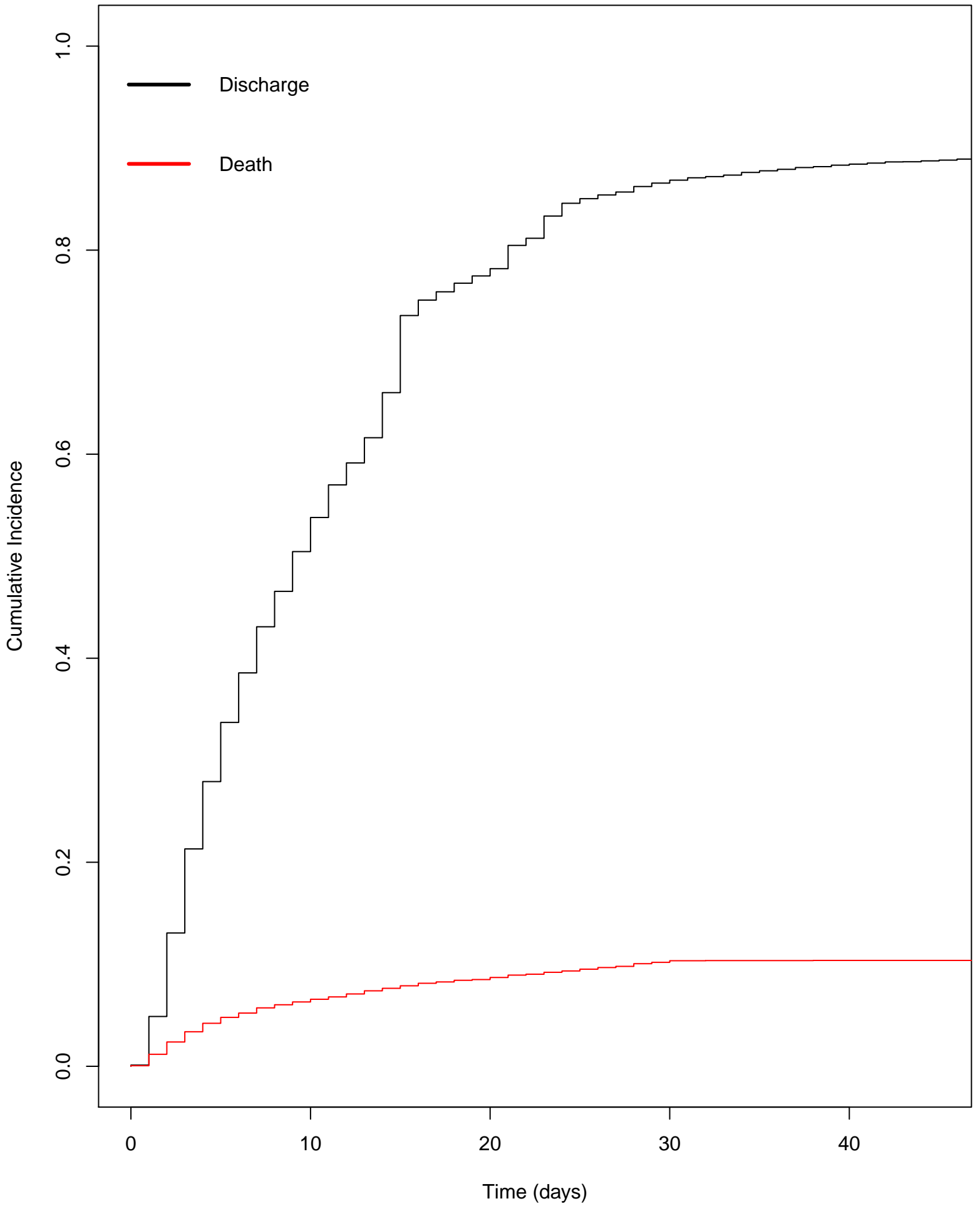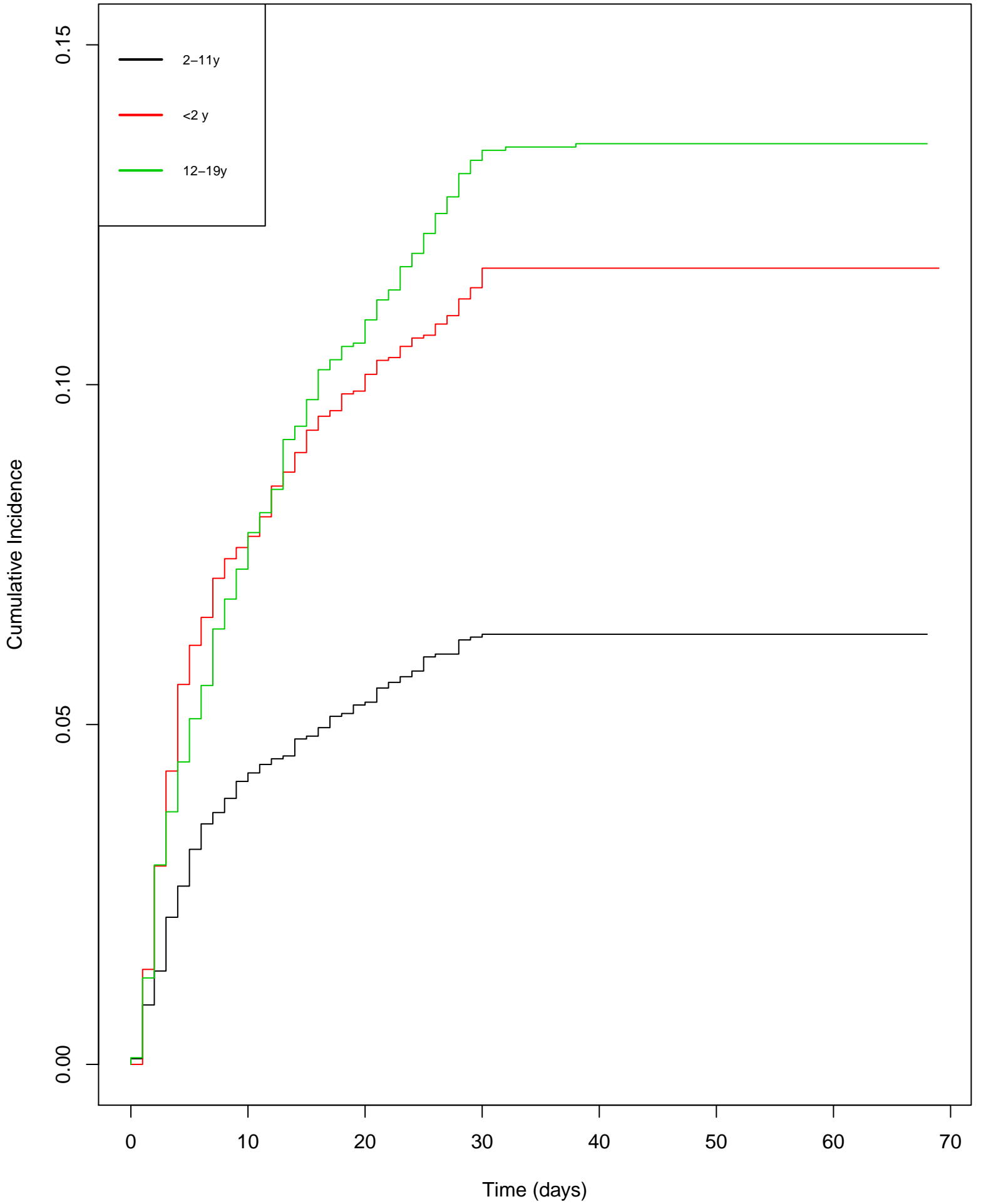
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Supplementary figures legends

Figure S.9. Cumulative incidence functions for mortality and discharge in children and adolescents with Covid-19 that fulfilled SIVEP criteria.

Figure S.10. Cumulative incidence functions for mortality of children and adolescents with COVID-19 that fulfilled SIVEP criteria according to the (A) Age-group; (B) Region; (C) Ethnicity; and (D) Number of comorbidities