

SUPPLEMENT 1

Table 1. Comparison of individuals hospitalized with ASD and individuals that were not hospitalized with ASD, 2008-2018.

Covariates	Total (N=100,852) N (%)	ASD (N=948) N (%)	Non-ASD (N=99,904) N (%)	p value ¹
Sex				
Male	47,234 (46.83)	688 (72.57)	46,546 (46.59)	<0.001
Female	53,618 (53.17)	260 (27.43)	53,358 (53.41)	
Age groups (years)				
<5	32,947 (32.67)	243 (25.63)	32,704 (32.74)	<0.001
5 - 10	6,675 (6.62)	122 (12.87)	6,553 (6.56)	
11-24	18,220 (18.07)	380 (40.08)	17,840 (17.86)	
>25	43,010 (42.65)	203 (21.41)	42,807 (42.85)	
Race				
White	34,715 (34.42)	581 (61.29)	34,134 (34.17)	<0.001
Black	6,056 (6.00)	35 (3.69)	6,021 (6.03)	
Asian	537 (0.53)	04 (0.42)	533 (0.53)	
Pardo/ Black	57,011 (56.53)	323 (34.07)	56,688 (56.74)	
Indigenous	682 (0.68)	01 (0.11)	681 (0.68)	
Missing data	1,851 (1.84)	04 (0.42)	1,847 (1.85)	
Location of residence				
Rural	84,232 (16.32)	64 (6.75)	16,398 (16.41)	<0.001
Urban	16,462 (83.52)	884 (93.25)	83,348 (83.43)	
Missing data	158 (0.16)	-	158 (0.16)	
Brazilian regions				
Southeast	40,013 (39.67)	615 (64.87)	39,398 (39.44)	<0.001
Northeast	28,945 (28.70)	77 (8.12)	28,868 (28.90)	
Central-West	8,586 (8.51)	25 (2.64)	8,561 (8.57)	
South	11,676 (11.58)	197 (20.78)	11,479 (11.49)	
North	11,632 (11.53)	34 (3.59)	11,598 (11.61)	
Household characteristics				
Water supply				
Public network (running water)	76,224 (75.58)	823 (86.81)	75,401 (75.47)	<0.001
Well, natural sources, or other	20,431 (20.26)	92 (9.70)	20,339 (20.36)	
Missing data	4,197 (4.16)	33 (3.48)	4,164 (4.17)	
Waste				
Public collection system	82,765 (82.07)	878 (92.62)	81,887 (81.97)	<0.001
Burned, buried, outdoor disposal, or other	13,890 (13.77)	37 (3.90)	13,853 (13.87)	
Missing data	4,197 (4.16)	33 (3.48)	4,164 (4.17)	
Sanitation				
Public network	53,605 (53.15)	706 (74.47)	52,899 (52.95)	<0.001
Septic tank	12,958 (12.85)	98 (10.34)	12,860 (12.87)	
Homemade septic tank	21,599 (21.42)	79 (8.33)	21,520 (21.54)	
Ditch or other	5,017 (4.97)	28 (2.95)	4,989 (4.99)	
Missing data	7,673 (7.61)	37 (3.90)	7,636 (7.64)	
Construction materials				
Bricks/cement	82,285 (81.59)	833 (87.87)	81,452 (81.53)	<0.001
Wood, other plant materials, or other	14,370 (14.25)	82 (8.65)	14,288 (14.30)	
Missing data	4,197 (4.16)	33 (3.48)	4,164 (4.17)	
Year of registration				
2008	8,941 (8.87)	54 (5.70)	8,887 (8.90)	<0.001
2009	9,267 (9.19)	45 (4.75)	9,222 (9.23)	
2010	10,065 (9.98)	65 (6.86)	10,000 (10.01)	
2011	8,009 (7.94)	89 (9.39)	7,920 (7.93)	
2012	13,049 (12.94)	186 (19.62)	12,863 (12.88)	
2013	9,481 (9.40)	64 (6.75)	9,417 (9.43)	
2014	9,319 (9.24)	59 (6.22)	9,260 (9.27)	
2015	6,757 (6.70)	55 (5.80)	6,702 (6.71)	
2016	7,213 (7.15)	52 (5.49)	7,161 (7.17)	
2017	9,250 (9.17)	114 (12.03)	9,136 (9.14)	
2018	9,501 (9.42)	165 (17.41)	9,336 (9.34)	
Comorbidity hospitalization				
Yes	5,049 (5.01)	73 (7.70)	4,976 (4.98)	<0.001
No	95,803 (94.99)	875 (92.30)	94,928 (95.02)	

¹ Chi-square test.

Table 2. Test of proportional-hazards assumption

	rho	Chi2*
ASD	0.02201	0.3338
Global test		0.3338

*p<0.05

Table 3. Exploratory analysis of the relationship between ASD-related hospitalization and mortality by covariates

Covariates	Number of deaths		HR (95% CI)
	ASD	Non-ASD	
ASD Hospitalization			
No	923	97,865	1.00
Yes	25	2,039	1.90 (1.24 – 2.91)
Sex			
Male	13	1,182	1.00
Female	12	857	0.62 (0.57 – 0.68)
Age groups (years)			
<5	02	80	1.00
5 - 10	01	17	0.94 (0.54 – 1.65)
11-24	08	119	3.07 (2.27 – 4.13)
>25	14	1,823	18.90 (14.84 – 24.09)
Race			
White	20	818	1.00
Black	01	170	0.99 (0.83 – 1.18)
Asian	00	09	0.88 (0.46 – 1.70)
Pardo/ Black	03	978	0.85 (0.76 – 0.94)
Indigenous	03	00	0.66 (0.28 – 1.61)
Location of residence			
Urban	22	1,752	1.00
Rural	03	274	0.87 (0.72 – 1.06)
Brazilian regions			
Southeast	15	898	1.00
Northeast	02	482	0.84 (0.74 – 0.95)
Central-West	02	198	0.90 (0.76 – 1.07)
South	06	289	0.94 (0.81 – 1.10)
North	00	172	0.82 (0.68 – 1.01)
Household characteristics			
Water supply			
Public network (running water)	20	1,603	1.00
Well, natural sources, or other	02	353	0.93 (0.80 – 1.09)
Waste			
Public collection system	20	1,718	1.00
Burned, buried, outdoor disposal, or other	02	238	0.86 (0.70 – 1.06)
Sanitation			
Public network	16	1,121	1.00
Septic tank	03	263	1.11 (0.96 – 1.29)
Homemade septic tank	02	429	1.17 (1.02 – 1.34)
Ditch or other	01	90	1.07 (0.84 – 1.36)
Construction materials			
Bricks/cement	21	1,659	1.00
Wood, other plant materials, or other	01	297	1.14 (0.98 – 1.33)
Year of registration			
2008	03	285	1.00
2009	01	231	0.93 (0.78 – 1.11)
2010	03	193	0.80 (0.66 – 0.97)
2011	03	257	1.28 (1.06 – 1.54)
2012	08	372	1.29 (1.08 – 1.53)
2013	02	178	1.10 (0.87 – 1.38)
2014	00	177	1.23 (1.01 – 1.53)
2015	01	110	1.32 (1.03 – 1.69)
2016	00	76	1.31 (1.03 – 1.69)
2017	02	116	2.44 (1.89 – 3.16)
2018	02	44	2.60 (1.82 – 3.73)
Comorbidity hospitalization			
No	22	1,565	1.00
Yes	03	474	3.56 (3.19 – 3.97)

HR= Hazard Ratio; CI= Confidence Interval