Table S1. Severity index of bronchiolitis [11].

	Mild	Moderate	Severe
Respiratory rate	Normal to slightly increased	Increased	Markedly increased compared to normal values
Respiratory effort	Mild chest wall retraction	Tracheal tug	Marked chest wall retraction
		Nasal Flare	Nasal Flare
		Moderate chest wall retraction	Grunting
Oxygen Saturation	No supplemental oxygen requirement, O2 saturations > 95%	Saturation 90-95%	Saturations < 90%, may not be corrected by O2
Feeding	Normal to slightly increased	50-75% of normal feeds	< 50% of feeds, unable to feed
Apnoea	Nil	May have brief episodes	May have increasing episodes

Table S2. Multivariate analysis of the predictors of the care setting for patients with bronchiolitis.

Care setting	Predictors	OR	95% CI	*p*-value
SSO vs PEDd	Age ≤ 3 months	1.483	0.958-2.295	0.077
	Age ≤ 6 months	1.459	1.094-1.946	**0.010**
	Prematurity	2.626	1.266-5.446	**0.009**
	Other risk factors*	2.589	1.325-5.058	**0.005**
	Feeding difficulties	1.863	1.431-2.425	**< 0.001**
	Days of symptoms	0.966	0.938-0.994	**0.018**
	SpO_2	0.889	0.828-0.955	**0.001**
	Clinical severity°	3.174	2.085-4.834	**< 0.001**
	Fever	1.779	1.252-2.529	**0.001**
	Previous PED access	1.855	1.276-2.699	**0.001**
Hospitalized vs PEDd	Age ≤ 3 months	37.368	27.232-51.277	**< 0.001**
	Age ≤ 6 months	5.677	4.302 -7.490	**< 0.001**
	Prematurity	7.945	4.469-14.122	**< 0.001**
	Other risk factors*	13.073	7.787-21.946	**< 0.001**
	Feeding difficulties	4.879	3.886 - 6.127	**< 0.001**
	Days of symptoms	1.010	0.992- 1.029	0.263
	SpO_2	0.787	0.739-0.837	**< 0.001**
	Clinical severity°	6.588	4.570- 9.497	**< 0.001**
	Fever	2.226	1.570 -3.156	**< 0.001**
	Previous PED access	4.287	3.174- 5.791	**< 0.001**

Significant p-values are indicated in bold. CI: confidence interval; OR: odds ratio; PEDd: discharged from the Pediatric Emergency Department; SpO2: peripheral oxygen saturation; SSO: Short-stay Observation unit; *Other risk factors include: previous episodes of apnea, history of chronic lung or congenital heart disease, immunodeficiency, severe neurological or muscular disease; ° according to the Italian inter-society consensus document on bronchiolitis [11].

Table S3. Bivariate tests of the predictors of pharmacological therapies and CXR use.

	Not administered therapy / Not performed CXR	Administered therapy / Performed CXR	*p*-value
Systemic corticosteroids, n (%)	**1763 (55.1%)**	**1438 (44.9%)**	
PEDd	1001 (56.8%)	639 (44.4%)	**< 0.001**
SSO	127 (7.2%)	187 (13%)	**< 0.001**
Hospitalization	635 (36%)	612 (42.6%)	**< 0.001**
Age ≤ 3 months	464 (26.3%)	321 (22.3%)	**0.033**
Age ≤ 6 months	482 (27.3%)	416 (28.9%)	**0.033**
Age > 6 months	817 (46.3%)	701 (48.7%)	**0.033**
Prematurity	106 (6%)	132 (9.2%)	**< 0.001**
Other risk factors*	134 (7.6%)	167 (11.6%)	**< 0.001**
Severity_mild°	1544 (87.6%)	973 (67.7%)	**< 0.001**
Severity_moderate°	210 (11.9%)	430 (29.9%)	**< 0.001**
Severity_severe°	9 (0.5%)	35 (2.4%)	**< 0.001**
Fever	241 (13.8%)	139 (9.8%)	**< 0.001**
CXR	781 (44.3%)	749 (52.1%)	**< 0.001**
Bronchopneumonia	218 (12.4%)	308 (21.4%)	**< 0.001**
Antibiotics	**1446 (45.2%)**	**1755 (54.8%)**	
PEDd	667 (46.1%)	973 (55.4%)	**< 0.001**
SSO	152 (10.5%)	162 (9.2%)	**< 0.001**
Hospitalization	627 (43.4%)	620 (35.3%)	**< 0.001**
Age ≤ 3 months	443 (30.6%)	342 (19.5%)	**< 0.001**
Age ≤ 6 months	439 (30.4%)	459 (26.2%)	**< 0.001**
Age > 6 months	564 (39%)	954 (54.4%)	**< 0.001**
Prematurity	113 (7.8%)	125 (7.1%)	0.500
Other risk factors*	139 (9.6%)	162 (9.2%)	0.758
Severity_mild°	1125 (77.8%)	1392 (79.3%)	**0.002**
Severity_moderate°	311 (21.5%)	329 (18.7%)	**0.002**
Severity_severe°	10 (0.7%)	34 (1.9%)	**0.002**
Fever	87 (6.1%)	293 (16.8%)	**< 0.001**
CXR	552 (38.2%)	978 (55.7%)	**< 0.001**
Bronchopneumonia	72 (5%)	454 (25.9%)	**< 0.001**
Adrenaline aerosols, n (%)	**580 (46.5%)**	**667 (53.5%)**	
Age ≤ 3 months	228 (39.3%)	381 (57.1%)	**< 0.001**
Age ≤ 6 months	176 (30.3%)	201 (30.1%)	**< 0.001**
Age > 6 months	176 (30.3%)	85 (12.7%)	**< 0.001**
Prematurity	94 (16.2%)	107 (16.0%)	1.000

Other risk factors*	131 (22.6%)	127 (19.0%)	0.141
Severity_mild°	388 (66.9%)	331 (49.6%)	**< 0.001**
Severity_moderate°	184 (31.7%)	304 (45.6%)	**< 0.001**
Severity_severe°	8 (1.4%)	32 (4.8%)	**< 0.001**
Fever	81 (14.1%)	71 (10.7%)	0.084
CXR	350 (60.3%)	529 (79.3%)	**< 0.001**
Bronchopneumonia	126 (21.7%)	245 (36.7%)	**< 0.001**
Salbutamol aerosols, n (%)	**1218 (38.1%)**	**1983 (61.9%)**	
PEDd	392 (32.2%)	1248 (62.9%)	**< 0.001**
SSO	56 (4.6%)	258 (13%)	**< 0.001**
Hospitalization	770 (63.2%)	477 (24.1%)	**< 0.001**
Age ≤ 3 months	634 (52.1%)	151 (7.6%)	**< 0.001**
Age ≤ 6 months	289 (23.7%)	609 (30.7%)	**< 0.001**
Age > 6 months	295 (24.2%)	1223 (61.7%)	**< 0.001**
Prematurity	121 (9.9%)	117 (5.9%)	**< 0.001**
Other risk factors*	149 (12.2%)	152 (7.7%)	**< 0.001**
Severity_mild°	915 (75.1%)	1602 (80.8%)	**< 0.001**
Severity_moderate°	281 (23.1%)	359 (18.1%)	**< 0.001**
Severity_severe°	22 (1.8%)	22 (1.1%)	**< 0.001**
Fever	153 (12.6%)	227 (11.6%)	0.406
CXR	684 (56.2%)	846 (42.7%)	**< 0.001**
Bronchopneumonia	222 (18.2%)	304 (15.3%)	**0.036**
CXR, n (%)	**1671 (52.2%)**	**1530 (47.8%)**	
PEDd	1143 (68.4%)	497 (32.5%)	**< 0.001**
SSO	160 (9.6%)	154 (10.1%)	**< 0.001**
Hospitalization	368 (22.0%)	879 (57.5%)	**< 0.001**
Age ≤ 3 months	321(19.2%)	464 (30.3%)	**< 0.001**
Age ≤ 6 months	456 (27.3%)	442 (28.9%)	**< 0.001**
Age > 6 months	894 (53.5%)	624 (40.8%)	**< 0.001**
Prematurity	66 (3.9%)	172 (11.2%)	**< 0.001**
Other risk factors*	98 (5.9%)	203 (13.3%)	**< 0.001**
Severity_mild°	1427 (85.4%)	1090 (71.2%)	**< 0.001**
Severity_moderate°	237 (14.2%)	403 (26.3%)	**< 0.001**
Severity_severe°	7 (0.4%)	37 (2.4%)	**< 0.001**
Fever	163 (9.9%)	217 (14.3%)	**< 0.001**

Results are reported as total number, percentage and p-value (statistically significant if < 0.05). Significant differences for p-values are indicated in bold. PEDd: discharged from the Pediatric Emergency Department, SSO: short-stay observation unit; CXR: chest X-ray. *Other risk factors include: previous episodes of apnea, history of chronic lung or congenital heart disease, immunodeficiency, severe neurological or muscular disease; ° according to the Italian inter-society consensus document on bronchiolitis [11].