

## Appendix

Diagnosis codes considered for the selection of hospitalizations due to RSV infection:

**466** (ACUTE BRONCHITIS AND BRONCHIOLITIS)

**466.0** (ACUTE BRONCHIOLITIS)

**466.1** (ACUTE BRONCHIOLITIS)

**466.11** (ACUTE BRONCHIOLITIS DUE TO RESPIRATORY SYNCITIAL VIRUS - RSV)

**466.19** (BRONCHIOLITIS ACUTE FROM OTHER INFECTIOUS AGENTS)

**480.1** (PNEUMONIA DUE TO RESPIRATORY SYNCITIAL VIRUS)

**079.6** (RESPIRATORY SYNCITIAL VIRUS)

**V04.82** (NEED FOR VACCINATION AND PROPHYLACTIC INOCULATIONS AGAINST RESPIRATORY SYNCITIAL VIRUS - RSV).

Table A. Health events and costs associated with RSV-infection by region.

<b>Piemonte</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>15.288</b>	<b>8.202</b>	<b>-7.086</b>
Hospitalizations	998	538	-460
ER visits	1.922	1.037	-885
Primary care visits	11.368	6.087	-5.281
Recurrent wheezing	748	403	-345
Asthma	251	136	-116
RSV-related death	1	1	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 4.258.942</b>	<b>€ 2.309.294</b>	<b>-€ 1.949.648</b>
Hospitalizations	€ 2.516.770	€ 1.358.495	-€ 1.158.275
ER visits	€ 587.273	€ 316.911	-€ 270.362
Primary care visits	€ 234.856	€ 125.759	-€ 109.097
Recurrent wheezing	€ 523.584	€ 282.295	-€ 241.288
Asthma	€ 197.974	€ 106.740	-€ 91.235
RSV-related death	€ 198.485	€ 119.094	-€ 79.391
<b>Valle d'Aosta</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>457</b>	<b>245</b>	<b>-212</b>
Hospitalizations	30	16	-14
ER visits	57	31	-26
Primary care visits	340	182	-158
Recurrent wheezing	22	12	-10
Asthma	8	4	-3

RSV-related death	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 127.420</b>	<b>€ 69.090</b>	<b>-€ 58.330</b>
Hospitalizations	€ 75.297	€ 40.644	-€ 34.653
ER visits	€ 17.570	€ 9.481	-€ 8.089
Primary care visits	€ 7.026	€ 3.762	-€ 3.264
Recurrent wheezing	€ 15.665	€ 8.446	-€ 7.219
Asthma	€ 5.923	€ 3.193	-€ 2.730
RSV-related death	€ 5.938	€ 3.563	-€ 2.375
<b>Liguria</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>5.010</b>	<b>2.688</b>	<b>-2.322</b>
Hospitalizations	327	176	-151
ER visits	630	340	-290
Primary care visits	3.725	1.995	-1.731
Recurrent wheezing	245	132	-113
Asthma	82	44	-38
RSV-related death	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 1.395.749</b>	<b>€ 756.807</b>	<b>-€ 638.943</b>
Hospitalizations	€ 824.801	€ 445.209	-€ 379.592
ER visits	€ 192.462	€ 103.859	-€ 88.604
Primary care visits	€ 76.967	€ 41.214	-€ 35.754
Recurrent wheezing	€ 171.590	€ 92.514	-€ 79.076
Asthma	€ 64.881	€ 34.981	-€ 29.900
RSV-related death	€ 65.048	€ 39.030	-€ 26.018
<b>Lombardia</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>39.756</b>	<b>21.328</b>	<b>-18.428</b>
Hospitalizations	2.595	1.399	-1.196
ER visits	4.998	2.697	-2.301
Primary care visits	29.561	15.829	-13.732
Recurrent wheezing	1.946	1.049	-897
Asthma	654	353	-301
RSV-related death	3	2	-1
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 11.075.238</b>	<b>€ 6.005.243</b>	<b>-€ 5.069.995</b>
Hospitalizations	€ 6.544.777	€ 3.532.721	-€ 3.012.056
ER visits	€ 1.527.183	€ 824.116	-€ 703.067
Primary care visits	€ 610.735	€ 327.031	-€ 283.704
Recurrent wheezing	€ 1.361.562	€ 734.100	-€ 627.462
Asthma	€ 514.826	€ 277.574	-€ 237.252
RSV-related death	€ 516.154	€ 309.701	-€ 206.453
<b>Trentino Alto Adige</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>5.250</b>	<b>2.817</b>	<b>-2.433</b>
Hospitalizations	343	185	-158
ER visits	660	356	-304
Primary care visits	3.904	2.090	-1.813
Recurrent wheezing	257	139	-118
Asthma	86	47	-40

RSV-related death	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 1.462.555</b>	<b>€ 793.030</b>	<b>-€ 669.525</b>
Hospitalizations	€ 864.279	€ 466.518	-€ 397.761
ER visits	€ 201.674	€ 108.830	-€ 92.844
Primary care visits	€ 80.651	€ 43.187	-€ 37.465
Recurrent wheezing	€ 179.803	€ 96.943	-€ 82.860
Asthma	€ 67.986	€ 36.655	-€ 31.331
RSV-related death	€ 68.161	€ 40.898	-€ 27.263
<b>Veneto</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>18.681</b>	<b>10.022</b>	<b>-8.659</b>
Hospitalizations	1.219	657	-562
ER visits	2.348	1.267	-1.081
Primary care visits	13.891	7.438	-6.453
Recurrent wheezing	914	493	-421
Asthma	307	166	-142
RSV-related death	1	1	-1
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 5.204.161</b>	<b>€ 2.821.813</b>	<b>-€ 2.382.348</b>
Hospitalizations	€ 3.075.336	€ 1.659.996	-€ 1.415.340
ER visits	€ 717.611	€ 387.245	-€ 330.365
Primary care visits	€ 286.979	€ 153.669	-€ 133.310
Recurrent wheezing	€ 639.787	€ 344.947	-€ 294.839
Asthma	€ 241.912	€ 130.429	-€ 111.483
RSV-related death	€ 242.537	€ 145.526	-€ 97.011
<b>Friuli-Venezia Giulia</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>4.304</b>	<b>2.309</b>	<b>-1.995</b>
Hospitalizations	281	151	-129
ER visits	541	292	-249
Primary care visits	3.200	1.714	-1.487
Recurrent wheezing	211	114	-97
Asthma	71	38	-33
RSV-related death	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 1.198.917</b>	<b>€ 650.080</b>	<b>-€ 548.837</b>
Hospitalizations	€ 708.486	€ 382.424	-€ 326.061
ER visits	€ 165.321	€ 89.212	-€ 76.108
Primary care visits	€ 66.113	€ 35.402	-€ 30.712
Recurrent wheezing	€ 147.392	€ 79.468	-€ 67.924
Asthma	€ 55.731	€ 30.048	-€ 25.683
RSV-related death	€ 55.875	€ 33.526	-€ 22.349
<b>Emilia-Romagna</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>17.474</b>	<b>9.375</b>	<b>-8.100</b>
Hospitalizations	1.140	615	-526
ER visits	2.197	1.185	-1.011
Primary care visits	12.993	6.958	-6.036
Recurrent wheezing	855	461	-394
Asthma	287	155	-132

RSV-related death	1	1	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 4.868.014</b>	<b>€ 2.639.547</b>	<b>-€ 2.228.468</b>
Hospitalizations	€ 2.876.694	€ 1.552.773	-€ 1.323.920
ER visits	€ 671.259	€ 362.232	-€ 309.026
Primary care visits	€ 268.443	€ 143.743	-€ 124.699
Recurrent wheezing	€ 598.462	€ 322.667	-€ 275.795
Asthma	€ 226.287	€ 122.005	-€ 104.282
RSV-related death	€ 226.871	€ 136.126	-€ 90.745
<b>Toscana</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>12.771</b>	<b>6.851</b>	<b>-5.919</b>
Hospitalizations	833	449	-384
ER visits	1.605	866	-739
Primary care visits	9.496	5.085	-4.411
Recurrent wheezing	625	337	-288
Asthma	210	113	-97
RSV-related death	1	1	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 3.557.646</b>	<b>€ 1.929.035</b>	<b>-€ 1.628.610</b>
Hospitalizations	€ 2.102.347	€ 1.134.799	-€ 967.548
ER visits	€ 490.570	€ 264.727	-€ 225.843
Primary care visits	€ 196.183	€ 105.051	-€ 91.133
Recurrent wheezing	€ 437.368	€ 235.811	-€ 201.557
Asthma	€ 165.375	€ 89.164	-€ 76.211
RSV-related death	€ 165.802	€ 99.484	-€ 66.318
<b>Umbria</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>2.896</b>	<b>1.554</b>	<b>-1.342</b>
Hospitalizations	189	102	-87
ER visits	364	196	-168
Primary care visits	2.153	1.153	-1.000
Recurrent wheezing	142	76	-65
Asthma	48	26	-22
RSV-related death	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 806.719</b>	<b>€ 437.421</b>	<b>-€ 369.298</b>
Hospitalizations	€ 476.721	€ 257.323	-€ 219.398
ER visits	€ 111.240	€ 60.029	-€ 51.211
Primary care visits	€ 44.486	€ 23.821	-€ 20.665
Recurrent wheezing	€ 99.176	€ 53.472	-€ 45.704
Asthma	€ 37.500	€ 20.218	-€ 17.281
RSV-related death	€ 37.597	€ 22.559	-€ 15.038
<b>Marche</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>5.170</b>	<b>2.774</b>	<b>-2.397</b>
Hospitalizations	337	182	-156
ER visits	650	351	-299
Primary care visits	3.845	2.059	-1.786
Recurrent wheezing	253	136	-117
Asthma	85	46	-39

RSV-related death	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 1.440.395</b>	<b>€ 781.015</b>	<b>-€ 659.381</b>
Hospitalizations	€ 851.184	€ 459.450	-€ 391.734
ER visits	€ 198.619	€ 107.181	-€ 91.438
Primary care visits	€ 79.429	€ 42.532	-€ 36.897
Recurrent wheezing	€ 177.079	€ 95.474	-€ 81.605
Asthma	€ 66.956	€ 36.100	-€ 30.856
RSV-related death	€ 67.129	€ 40.278	-€ 26.850
<b>Lazio</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>21.264</b>	<b>11.408</b>	<b>-9.856</b>
Hospitalizations	1.388	748	-640
ER visits	2.673	1.442	-1.231
Primary care visits	15.811	8.466	-7.345
Recurrent wheezing	1.041	561	-480
Asthma	350	189	-161
RSV-related death	1	1	-1
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 5.923.707</b>	<b>€ 3.211.967</b>	<b>-€ 2.711.740</b>
Hospitalizations	€ 3.500.542	€ 1.889.513	-€ 1.611.030
ER visits	€ 816.830	€ 440.787	-€ 376.043
Primary care visits	€ 326.658	€ 174.916	-€ 151.742
Recurrent wheezing	€ 728.246	€ 392.641	-€ 335.605
Asthma	€ 275.360	€ 148.463	-€ 126.897
RSV-related death	€ 276.071	€ 165.647	-€ 110.424
<b>Abruzzo</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>4.728</b>	<b>2.536</b>	<b>-2.191</b>
Hospitalizations	309	166	-142
ER visits	594	321	-274
Primary care visits	3.515	1.882	-1.633
Recurrent wheezing	231	125	-107
Asthma	78	42	-36
RSV-related death	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 1.317.049</b>	<b>€ 714.134</b>	<b>-€ 602.916</b>
Hospitalizations	€ 778.294	€ 420.105	-€ 358.189
ER visits	€ 181.610	€ 98.003	-€ 83.608
Primary care visits	€ 72.628	€ 38.890	-€ 33.738
Recurrent wheezing	€ 161.915	€ 87.298	-€ 74.617
Asthma	€ 61.222	€ 33.009	-€ 28.214
RSV-related death	€ 61.380	€ 36.829	-€ 24.551
<b>Molise</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>993</b>	<b>533</b>	<b>-460</b>
Hospitalizations	65	35	-30
ER visits	125	67	-57
Primary care visits	738	395	-343
Recurrent wheezing	49	26	-22
Asthma	16	9	-8

RSV-related death	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 276.673</b>	<b>€ 150.018</b>	<b>-€ 126.655</b>
Hospitalizations	€ 163.497	€ 88.252	-€ 75.245
ER visits	€ 38.151	€ 20.587	-€ 17.563
Primary care visits	€ 15.257	€ 8.170	-€ 7.087
Recurrent wheezing	€ 34.014	€ 18.339	-€ 15.675
Asthma	€ 12.861	€ 6.934	-€ 5.927
RSV-related death	€ 12.894	€ 7.737	-€ 5.157
<b>Campania</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>25.946</b>	<b>13.920</b>	<b>-12.027</b>
Hospitalizations	1.693	913	-780
ER visits	3.262	1.760	-1.502
Primary care visits	19.293	10.331	-8.962
Recurrent wheezing	1.270	685	-585
Asthma	427	230	-197
RSV-related death	2	1	-1
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 7.228.209</b>	<b>€ 3.919.297</b>	<b>-€ 3.308.912</b>
Hospitalizations	€ 4.271.422	€ 2.305.616	-€ 1.965.806
ER visits	€ 996.710	€ 537.856	-€ 458.854
Primary care visits	€ 398.594	€ 213.436	-€ 185.158
Recurrent wheezing	€ 888.618	€ 479.107	-€ 409.511
Asthma	€ 335.999	€ 181.157	-€ 154.842
RSV-related death	€ 336.866	€ 202.125	-€ 134.741
<b>Puglia</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>15.418</b>	<b>8.271</b>	<b>-7.146</b>
Hospitalizations	1.006	543	-464
ER visits	1.938	1.046	-892
Primary care visits	11.464	6.139	-5.325
Recurrent wheezing	755	407	-348
Asthma	254	137	-117
RSV-related death	1	1	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 4.295.115</b>	<b>€ 2.328.908</b>	<b>-€ 1.966.207</b>
Hospitalizations	€ 2.538.146	€ 1.370.033	-€ 1.168.113
ER visits	€ 592.261	€ 319.603	-€ 272.658
Primary care visits	€ 236.851	€ 126.827	-€ 110.024
Recurrent wheezing	€ 528.031	€ 284.693	-€ 243.338
Asthma	€ 199.656	€ 107.646	-€ 92.009
RSV-related death	€ 200.171	€ 120.106	-€ 80.065
<b>Basilicata</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>1.896</b>	<b>1.017</b>	<b>-879</b>
Hospitalizations	124	67	-57
ER visits	238	129	-110
Primary care visits	1.410	755	-655
Recurrent wheezing	93	50	-43
Asthma	31	17	-14

RSV-related death	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 528.091</b>	<b>€ 286.343</b>	<b>-€ 241.748</b>
Hospitalizations	€ 312.069	€ 168.448	-€ 143.621
ER visits	€ 72.819	€ 39.296	-€ 33.524
Primary care visits	€ 29.121	€ 15.594	-€ 13.528
Recurrent wheezing	€ 64.922	€ 35.003	-€ 29.919
Asthma	€ 24.548	€ 13.235	-€ 11.313
RSV-related death	€ 24.611	€ 14.767	-€ 9.844
<b>Calabria</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>7.873</b>	<b>4.224</b>	<b>-3.649</b>
Hospitalizations	514	277	-237
ER visits	990	534	-456
Primary care visits	5.854	3.135	-2.719
Recurrent wheezing	385	208	-178
Asthma	129	70	-60
RSV-related death	1	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 2.193.344</b>	<b>€ 1.189.280</b>	<b>-€ 1.004.064</b>
Hospitalizations	€ 1.296.130	€ 699.621	-€ 596.509
ER visits	€ 302.444	€ 163.208	-€ 139.236
Primary care visits	€ 120.950	€ 64.765	-€ 56.185
Recurrent wheezing	€ 269.644	€ 145.381	-€ 124.263
Asthma	€ 101.956	€ 54.971	-€ 46.986
RSV-related death	€ 102.219	€ 61.333	-€ 40.886
<b>Sicilia</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>21.534</b>	<b>11.553</b>	<b>-9.981</b>
Hospitalizations	1.405	758	-648
ER visits	2.707	1.461	-1.246
Primary care visits	16.012	8.574	-7.438
Recurrent wheezing	1.054	568	-486
Asthma	354	191	-163
RSV-related death	1	1	-1
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 5.998.985</b>	<b>€ 3.252.785</b>	<b>-€ 2.746.201</b>
Hospitalizations	€ 3.545.027	€ 1.913.525	-€ 1.631.503
ER visits	€ 827.210	€ 446.389	-€ 380.822
Primary care visits	€ 330.809	€ 177.139	-€ 153.670
Recurrent wheezing	€ 737.500	€ 397.631	-€ 339.870
Asthma	€ 278.859	€ 150.350	-€ 128.510
RSV-related death	€ 279.579	€ 167.752	-€ 111.827
<b>Sardegna</b>			
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total events</b>	<b>4.528</b>	<b>2.429</b>	<b>-2.099</b>
Hospitalizations	295	159	-136
ER visits	569	307	-262
Primary care visits	3.367	1.803	-1.564
Recurrent wheezing	222	119	-102
Asthma	74	40	-34

	0	0	0
	<b>Standard of care</b>	<b>Nirsevimab</b>	<b>Difference</b>
<b>Total costs</b>	<b>€ 1.261.323</b>	<b>€ 683.918</b>	<b>-€ 577.406</b>
Hospitalizations	€ 745.364	€ 402.330	-€ 343.033
ER visits	€ 173.926	€ 93.856	-€ 80.070
Primary care visits	€ 69.555	€ 37.245	-€ 32.310
Recurrent wheezing	€ 155.064	€ 83.604	-€ 71.460
Asthma	€ 58.632	€ 31.612	-€ 27.020
RSV-related death	€ 58.783	€ 35.271	-€ 23.512