**Supplementary Table S1.** Number of influenza cases, antiviral treatment, deaths and ICU admissions by hospital\*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Hospital** | **Number of influenza cases**  **n (%)** | **Antiviral treatment**  **n (%)** | **Deaths**  **n (%)** | **ICU**  **n (%)** |
| Hospital Althaia Manresa | 100 (5.8%) | 92 (92.0%) | 21 (21.0%) | 56 (56.0%) |
| Hospital Clínic de Barcelona | 283 (16.4%) | 253 (89.4%) | 59 (20.8%) | 86 (30.4%) |
| Hospital de Mataró | 201 (11.6%) | 172 (85.6%) | 16 (8.0%) | 60 (29.9%) |
| Hospital de Sabadell | 149 (8.6%) | 139 (93.3%) | 13 (8.7%) | 35 (23.5%) |
| Hospital de Terrassa | 178 (10.3%) | 174 (97.8%) | 13 (7.3%) | 31 (17.4%) |
| Hospital Verge de la Cinta de Tortosa | 78 (5.7%) | 71 (91.0%) | 6 (7.7%) | 32 (41.0%) |
| Hospital Universitari Arnau de Vilanova de Lleida | 98 (5.7%) | 88 (89.8%) | 14 (14.3%) | 55 (56.1%) |
| Hospital Universitari de Girona Dr. Josep Trueta | 102 (5.9%) | 96 (94.1%) | 16 (15.7%) | 52 (51.0%) |
| Hospital Universitari Vall d'Hebron de Barcelona | 216 (12.5%) | 196 (90.7%) | 29 (13.4%) | 72 (33.3%) |
| Hospital Universitari Joan XXIII de Tarragona | 134 (7.8%) | 118 (88.1%) | 20 (14.9%) | 57 (42.5%) |
| Hospital Universitari Mútua de Terrassa | 188 (10.9%) | 178 (94.7%) | 17 (9.0%) | 59 (31.4%) |

\*There are only 11 hospitals detailed because one of the participant hospitals in the surveillance system is exclusively paediatric

**Supplementary Table S2.** Number of influenza cases, antiviral treatment, death and ICU admission by influenza season

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Season** | **Number of influenza cases**  **n (%)** | **Antiviral treatment**  **n (%)** | **Death**  **n (%)** | **ICU**  **n (%)** |
| 2010-2011 | 169 (9.8%) | 161 (95.3%) | 29 (17.2%) | 66 (39.1%) |
| 2011-2012 | 122 (7.1%) | 103 (84.4%) | 15 (12.3%) | 44 (36.1%) |
| 2012-2013 | 118 (6.8%) | 92 (78.0%) | 16 (13.6%) | 44 (37.3%) |
| 2013-2014 | 345 (20.0%) | 316 (91.6%) | 43 (12.5%) | 130 (37.7%) |
| 2014-2015 | 425 (24.6%) | 390 (91.8%) | 61 (14.4%) | 132 (31.1%) |
| 2015-2016 | 548 (31.7%) | 515 (94.0%) | 60 (10.9%) | 179 (32.7%) |

**Supplementary Table S3.** Crude and adjusted OR of NAI treatment in reducing the mortality by presence or absence of risk conditions and age ≥65 years

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Death**  **n (%)** | **No death**  **n (%)** | **Crude OR**  **(95% CI)** | ***P* Value** | **Adjusted OR**  **(95% CI)** | ***P* Value** |
|  | **ABSENSE OF RISK CONDITONS** | | |  |  |  |
|  | N=34 | N=409 |  |  |  |  |
| **NAI treatment** |  |  |  |  |  |  |
| Yes | 28 (82.4%) | 373 (91.2%) | 0.46 (0.18-1.21) | 0.12 | 0.48 (0.18-1.30) | 0.15a |
| No | 6 (17.6%) | 36 (8.8%) | Ref |  | Ref |  |
| **NAI treatment** |  |  |  |  |  |  |
| ≤48h symptom onset | 3 (9.4%) | 74 (18.8%) | 0.25 (0.06-1.06) | 0.06 | 0.27 (0.06-1.20) | 0.08b |
| >48h symptom onset | 23 (71.9%) | 283 (72.0%) | 0.50 (0.19-1.33) | 0.16 | 0.52 (0.19-1.44) | 0.21c |
| No | 6 (17.6%) | 36 (8.8%) | Ref |  | Ref |  |
| **NAI treatment** |  |  |  |  |  |  |
| ≤3 days symptom onset | 9 (28.1%) | 124 (31.6%) | 0.46 (0.15-1.41) | 0.17 | 0.50 (0.15-1.60) | 0.24d |
| >3 days symptom onset | 17 (53.1%) | 233 (59.3%) | 0.45 (0.16-1.23) | 0.12 | 0.46 (0.16-1.31) | 0.14e |
| No | 6 (17.6%) | 36 (8.8%) | Ref |  | Ref |  |
| **NAI treatment** |  |  |  |  |  |  |
| ≤5 days symptom onset | 14 (43.8%) | 218 (55.5%) | 0.40 (0.14-1.13) | 0.08 | 0.43 (0.15-1.27) | 0.12f |
| >5 days symptom onset | 12 (37.5%) | 139 (35.4%) | 0.53 (0.18-1.52) | 0.23 | 0.53 (0.17-1.60) | 0.26g |
| No | 6 (17.6%) | 36 (8.8%) | Ref |  | Ref |  |
|  | **PRESENCE OF RISK CONDITIONS** | | |  |  |  |
|  | **N=190** | **N=1094** |  |  |  |  |
| **NAI treatment** |  |  |  |  |  |  |
| Yes | 163 (85.8%) | 1013 (92.6%) | 0.49 (0.31-0.79) | 0.003 | 0.57 (0.35-0.93) | 0.02 |
| No | 27 (14.2%) | 81 (7.4%) | Ref |  | Ref |  |
| **NAI treatment** |  |  |  |  |  |  |
| ≤48h symptom onset | 34 (18.6%) | 326 (31.0%) | 0.32 (0.18-0.56) | <0.001 | 0.36 (0.20-0.65) | <0.001 |
| >48h symptom onset | 122 (66.7%) | 646 (61.3%) | 0.57 (0.35-0.92) | 0.02 | 0.65 (0.39-1.07) | 0.09h |
| No | 27 (14.2%) | 81 (7.4%) | Ref |  | Ref |  |
| **NAI treatment** |  |  |  |  |  |  |
| ≤3 days symptom onset | 61 (33.3%) | 455 (43.2%) | 0.41 (0.24-0.69) | <0.001 | 0.47 (0.28-0.80) | 0.006 |
| >3 days symptom onset | 95 (51.9%) | 517 (49.1%) | 0.55 (0.34-0.90) | 0.02 | 0.63 (0.38-1.04) | 0.07i |
| No | 27 (14.2%) | 81 (7.4%) | Ref |  | Ref |  |
| **NAI treatment** |  |  |  |  |  |  |
| ≤5 days symptom onset | 97 (53.0%) | 672 (63.8%) | 0.44 (0.27-0.72) | 0.001 | 0.50 (0.30-0.84) | 0.008 |
| >5 days symptom onset | 59 (32.2%) | 300 (28.5%) | 0.59 (0.35-0.99) | 0.04 | 0.66 (0.39-1.13) | 0.13j |
| No | 27 (14.2%) | 81 (7.4%) | Ref |  | Ref |  |
|  | **PATIENTS AGED ≥65 YEARS** | | |  |  |  |
|  | **N=150** | **N=769** |  |  |  |  |
| **NAI treatment** |  |  |  |  |  |  |
| Yes | 130 (86.7%) | 694 (90.2%) | 0.74 (0.43-1.26) | 0.27 | 0.76 (0.44-1.32) | 0.33k |
| No | 20 (13.3%) | 75 (9.8%) | Ref |  | Ref |  |
| **NAI treatment** |  |  |  |  |  |  |
| ≤48h symptom onset | 28 (19.6%) | 233 (31.8%) | 0.47 (0.25-0.90) | 0.02 | 0.49 (0.25-0.95) | 0.03 |
| >48h symptom onset | 95 (66.4%) | 424 (57.9%) | 0.84 (0.49-1.46) | 0.55 | 0.88 (0.50-1.54) | 0.65l |
| No | 20 (13.3%) | 75 (9.8%) | Ref |  | Ref |  |
| **NAI treatment** |  |  |  |  |  |  |
| ≤3 days symptom onset | 50 (35.0%) | 323 (44.1%) | 0.61 (0.34-1.10) | 0.10 | 0.63 (0.34-1.16) | 0.14m |
| >3 days symptom onset | 73 (51.0%) | 334 (45.6%) | 0.82 (0.47-1.44) | 0.49 | 0.85 (0.48-1.52) | 0.58n |
| No | 20 (13.3%) | 75 (9.8%) | Ref |  | Ref |  |
| **NAI treatment** |  |  |  |  |  |  |
| ≤5 days symptom onset | 74 (51.7%) | 463 (63.3%) | 0.62 (0.35-1.08) | 0.09 | 0.64 (0.36-1.15) | 0.13o |
| >5 days symptom onset | 49 (34.3%) | 194 (26.5%) | 0.95 (0.53-1.72) | 0.88 | 0.97 (0.53-1.78) | 0.92p |
| No | 20 (13.3%) | 75 (9.8%) | Ref |  | Ref |  |

Statistical power: a 37%, b 16%, c 39%, d 18%, e 43%, f 43%, g 19%, h 67%, i 62%, j 30%, k 20%, l 9%, m 40%, n 10%, o 51%, p 3%