**Supplementary Appendix**

Title: Increased Antiviral Treatment among Hospitalized Children and Adults with Laboratory-Confirmed Influenza, 2010-2015

**Supplementary Material:**

**List of Contents:**

Supplemental Figure 1. Flow Chart of Enrolled Patients Hospitalized with Laboratory-Confirmed Influenza, FluSurvNET 2010-11 to 2014-15 Seasons.

Supplemental Figure 2. Timing of Antiviral Treatment in Relation to Admission among Children and Adults with Laboratory-Confirmed Influenza, FluSurv-NET, 2010 to 2015 (n= 34,112).

Supplemental Table 1. Comparison by Antiviral Treatment Status of Characteristics of Children and Adults Hospitalized with Laboratory-Confirmed Influenza from 2010 to 2015 (n=43,708 Patients with Antiviral Treatment Data Available).

**Supplemental Figure 1. Flow Chart of Enrolled Patients Hospitalized with Laboratory-Confirmed Influenza, FluSurvNET 2010-11 to 2014-15 Seasons.**

**Enrolled patients hospitalized with influenza (48,456)**

**Excluded 4,748:**

**Positive test >3 days post admit (1,358)**

**RIDT negative, PCR positive (3,145)**

**Missing antiviral treatment status (245)**

**Total patients analyzed for antiviral treatment**

**(43,708)**

**Excluded 2,840 patients with missing or erroneous dates**

**Total patients analyzed for timing of illness onset in relation to admission (40,868)**

**Removed patients without antiviral treatment dates (6,756)**

**Total patients analyzed for timing of treatment in relation to admission (34,112)**

**Supplemental Figure 2. Timing of Antiviral Treatment in Relation to Admission among Children and Adults with Laboratory-Confirmed Influenza, FluSurv-NET, 2010 to 2015 (n= 34,112).**

**Supplemental Table 1. Comparison by Antiviral Treatment Status of Characteristics of Children and Adults Hospitalized with Laboratory-Confirmed Influenza from 2010 to 2015 (n=43,708 Patients with Antiviral Treatment Data Available)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Received Antivirals (n=36,780) | No Antivirals (n=6928) | P-value |
| Characteristic | N (%) | N (%) |  |
| Sex |  |  | 0.15 |
| Male | 16930 (46) | 3253 (47) |  |
| Female | 19850 (54) | 3675 (53) |  |
| Age Group, (years) |  |  | <0.001 |
| <1 | 1393 (4) | 552 (8) |  |
| ≥1 and <2 | 578 (2) | 257 (4) |  |
| ≥2 and <5 | 941 (3) | 369 (5) |  |
| ≥5 and <18 | 1744 (5) | 635 (9) |  |
| ≥18 and <65 | 13908 (38) | 2575 (37) |  |
| ≥65 | 18216 (50) | 2540 (37) |  |
| Race/Ethnicity |  |  | <0.001 |
| Hispanic/Latino | 3352 (9) | 760 (11) |  |
| Non-Hispanic, White | 17057 (46) | 2709 (39) |  |
| Non-Hispanic, Black | 5554 (15) | 1175 (17) |  |
| Other, Non-Hispanic | 1691 (5) | 292 (4) |  |
| Unknown | 9126 (25) | 1992 (29) |  |
| Underlying Condition (Any)a |  |  |  |
| All ages (n= 35,393) | 30407 (83) | 4986 (72) | <0.001 |
| Adults >18 to <65 years (n=32,342) | 28061 (87) | 4281 (84) | <0.001 |
| Children <18 years (n=3,051) | 2346 (50) | 705 (39) | <0.001 |
| Underlying Condition (Category)b |  |  |  |
| Chronic lung (n=11,062) | 9571 (29) | 1491 (28) | 0.05 |
| Cardiovascular (n= 17,103) | 14,862 (44) | 2241 (41) | <0.001 |
| Neurologic (n= 8,911) | 7,879 (21) | 1032 (15) | <0.001 |
| Immunocompromised (n= 6,443 | 5582 (17) | 861 (16) | 0.16 |
| Chronic metabolic (n=15,407) | 13,372 (40) | 2035 (37) | <0.001 |
| Blood disorders (n= 2,343) | 2004 (6) | 238 (5) | <0.001 |
| Renal (n= 7,089) | 6144 (19) | 945 (18) | 0.09 |
| Prematurity (n= 484) | 352 (1) | 132 (2) | <0.001 |
| Pregnant/post-partum (n=1,198) | 1048 (3) | 150 (2) | <0.001 |
| Morbid obesity (n=2,139) | 1889 (5) | 250 (4) | <0.001 |
| Liver disease (n=1,042) | 875 (2) | 167 (2) | 0.88 |
| Resident of Long-term facility (n=4,872) | 4438 (20) | 434 (15) | <0.001 |

aUnderlying condition defined per the U.S. Advisory Committee on Immunization Practices as presence of any of the following: asthma, chronic lung disease, hemoglobinopathy, chronic metabolic disease, cardiovascular disease, neuromuscular disorder/cerebral palsy, immunosuppression, renal disease, liver disease, morbid obesity, long term aspirin therapy, pregnancy or history of prematurity (in children 2 years or under)[9].

bVariable denominator based on the presence or absence of the specified high risk condition.