**Table 4: Vaccine effectiveness in preventing intensive care unit admission of hospitalized cases of laboratory confirmed influenza according to virus type and age and gender group. Catalonia, 2017-2018**

| **All patients** | **ICU admission** | **No ICU admission** | **aOR**a | **p value** | **Adjusted VE** |
| --- | --- | --- | --- | --- | --- |
| **n=1414** | **n=214 (15.1%)** | **n=1200 (84.9%)** | **(95%CI) b** |  | 95%CI |
| **Influenza vaccination** | | | | | |
| Vaccinated (465; 32.9%) | 52 (11.2%) | 413 (88.8%) | 0.69 (0.48;0.99) | 0.04 | 31% (1;52) |
| Unvaccinated (949;67.1%) | 162 (17.1%) | 787 (82.9%) | Ref. |  |  |
| **Influenza B**  **n = 859 (60.7%)** | |  |  |  |  |
| Vaccinated (295; 34.3%) | 33 (11.2%) | 262 (88.8%) | 0.75 (0.48;1.18) | 0.21 | 25% (18;52) |
| Unvaccinated (564; 65.7%) | 89 (15.8%) | 475 (84.2%) | Ref. |  |  |
| **Influenza A**  **n = 551 (38.9%)** | |  |  |  |  |
| Vaccinated (170; 30.9%) | 19 (11.2%) | 151 (88.8%) | 0.60 (0.32;1.11) | 0.09 | 40% (-11; 68) |
| Unvaccinated (381; 69.1%) | 73 (19.2%) | 308 (80.8%) | Ref. |  |  |
| **Female < 60 y**  **n = 125 (8.8%)** | |  |  |  |  |
| Vaccinated (14; 11.2%) | 1 (7.1%) | 13 (92.9%) | 0.28 (0.03;2.35) | 0.24 | 72% (-135;97) |
| Unvaccinated (111; 88.8%) | 28 (25.2%) | 83 (74.8%) | Ref. |  |  |
| **Female >= 60 y**  **n = 485 (34.3%)** | |  |  |  |  |
| Vaccinated (182; 37.5%) | 17 (9.3%) | 165 (90.7%) | 0.77 (0.4;1.48) | 0.43 | 23% (-48;60) |
| Unvaccinated (303; 62.5%) | 33 (10.9%) | 270 (89.1%) | Ref. |  |  |
| **Male < 60 y**  **n = 171 (24.2%)** | |  |  |  |  |
| Vaccinated (14; 8.2%) | 3 (21.4%) | 11 (78.6%) | 0.71 (0.18;2.74) | 0.62 | 29% (-74;82) |
| Unvaccinated (157; 91.8%) | 41(26.1%) | 116 (73.9%) | Ref. |  |  |
| **Male >= 60 y**  **n = 633 (44.7%)** | |  |  |  |  |
| Vaccinated (255; 40.3%) | 31 (12.2%) | 224 (87.8%) | 0.68 (0.42;1.10) | 0.12 | 32% (-10;58) |
| Unvaccinated (378; 59.7%) | 60(15.9%) | 318 (84.1%) | Ref. |  |  |

a aOR: Odds ratio adjusted by age, sex, at least one comorbidity and NI treatment (if yes, administered < or >48h after symptom onset) b CI: Confidence Interval