|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **ECDS Event HR (95% CI)** | | **ITU admission HR (95% CI)** | | **CPNS Death HR (95% CI)** | | **ONS COVID-19 Death HR**  **(95% CI)** | |
|  | Age-sex adj | Fully adj | Age-sex adj | Fully adj | Age-sex adj | Fully adj | Age-sex adj | Fully adj |
| **Age** |  |  |  |  |  |  |  |  |
| 18-<40 | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| 40-<50 | 1.04 (0.99-1.09) | 1.02 (0.97-1.08) | 0.97 (0.93-1.02) | 0.96 (0.91-1.02) | 1.04 (1.00-1.10) | 1.04 (0.99-1.10) | 1.01 (0.96-1.06) | 1.03 (0.98-1.09) |
| 50-<60 | 1.02 (0.98-1.06) | 1.02 (0.97-1.08) | 0.97 (0.93-1.01) | 0.95 (0.91-1.01) | 1.04 (1.00-1.09) | 1.05 (1.00-1.11) | 1.01 (0.97-1.05) | 1.01 (0.96-1.07) |
| 60-<70 | 1.02 (0.96-1.07) | 1.01 (0.95-1.06) | 0.98 (0.93-1.03) | 0.97 (0.92-1.03) | 0.98 (0.93-1.04) | 0.98 (0.93-1.04) | 1.06 (1.01-1.12) | 1.08 (1.02-1.14) |
| 70-<80 | 1.02 (0.97-1.08) | 1.01 (0.95-1.07) | 0.99 (0.94-1.04) | 0.99 (0.93-1.05) | 1.02 (0.97-1.08) | 1.03 (0.97-1.09) | 1.01 (0.96-1.07) | 1.02 (0.97-1.09) |
| 80+ | 0.99 (0.95-1.03) | 0.97 (0.92-1.02) | 0.98 (0.95-1.02) | 0.99 (0.94-1.04) | 1.05 (1.01-1.09) | 1.06 (1.01-1.12) | 0.99 (0.95-1.03) | 1.02 (0.97-1.07) |
|  |  |  |  |  |  |  |  |  |
| **Sex** |  |  |  |  |  |  |  |  |
| Female | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| Male | 0.99 (0.96-1.02) | 1.00 (0.97-1.04) | 1.01 (0.98-1.04) | 1.00 (0.97-1.04) | 1.01 (0.98-1.04) | 1.00 (0.97-1.04) | 0.99 (0.96-1.02) | 0.99 (0.96-1.02) |
|  |  |  |  |  |  |  |  |  |
| **BMI (kg/m2)** |  |  |  |  |  |  |  |  |
| <40 | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| ≥40 | 1.42 (0.93-2.19) | 1.36 (0.88-2.12) | 0.93 (0.55-1.57) | 0.89 (0.51-1.53) | 1.45 (0.96-2.21) | 1.44 (0.94-2.21) | 0.80 (0.45-1.41) | 0.76 (0.42-1.38) |
|  |  |  |  |  |  |  |  |  |
| **Smoking** |  |  |  |  |  |  |  |  |
| Non-smoker | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| Current | 1.02 (0.99-1.06) | 1.01 (0.97-1.06) | 0.99 (0.96-1.03) | 1.01 (0.96-1.05) | 1.00 (0.97-1.04) | 1.00 (0.95-1.04) | 0.99 (0.95-1.02) | 0.99 (0.94-1.03) |
|  |  |  |  |  |  |  |  |  |
| **Ethnicity\*** |  |  |  |  |  |  |  |  |
| White | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| Black | 1.01 (0.72-1.42) | 1.03 (0.73-1.45) | 0.94 (0.66-1.34) | 0.96 (0.67-1.38) | 1.22 (0.90-1.67) | 1.12 (0.80-1.57) | 0.98 (0.69-1.39) | 0.94 (0.65-1.36) |
| Asian | 0.93 (0.59-1.46) | 0.90 (0.56-1.46) | 1.26 (0.85-1.86) | 1.23 (0.82-1.87) | 1.08 (0.71-1.64) | 1.12 (0.73-1.73) | 1.08 (0.71-1.65) | 1.14 (0.74-1.75) |
| Mixed | 0.98 (0.41-2.36) | 1.03 (0.43-2.50) | 1.51 (0.72-3.18) | 1.35 (0.60-3.03) | 0.61 (0.19-1.89) | 0.68 (0.22-2.13) | 1.17 (0.52-2.63) | 1.06 (0.44-2.56) |
| Other | 0.98 (0.65-1.50) | 2.05 (1.00-4.20) | 1.29 (0.84-1.98) | 1.55 (0.68-3.52) | 0.95 (0.63-1.43) | 0.99 (0.37-2.68) | 0.73 (0.49-1.07) | 1.15 (0.47-2.80) |
|  |  |  |  |  |  |  |  |  |
| **IMD quintile** |  |  |  |  |  |  |  |  |
| 1 (least deprived) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| 2 | 1.06 (1.01-1.11) | 1.05 (0.99-1.11) | 0.99 (0.94-1.03) | 0.99 (0.93-1.05) | 1.00 (0.95-1.04) | 0.98 (0.93-1.04) | 1.00 (0.95-1.05) | 1.00 (0.94-1.05) |
| 3 | 1.05 (1.00-1.10) | 1.04 (0.98-1.11) | 0.99 (0.94-1.04) | 0.99 (0.93-1.05) | 0.98 (0.93-1.03) | 0.97 (0.91-1.03) | 0.99 (0.94-1.04) | 0.98 (0.92-1.04) |
| 4 | 1.07 (1.01-1.12) | 1.06 (0.99-1.13) | 0.97 (0.93-1.03) | 0.97 (0.91-1.04) | 0.98 (0.93-1.03) | 0.96 (0.90-1.02) | 0.99 (0.94-1.04) | 0.97 (0.91-1.04) |
| 5 (most deprived) | 1.04 (1.00-1.09) | 1.03 (0.97-1.09) | 1.01 (0.97-1.06) | 1.01 (0.96-1.07) | 0.97 (0.92-1.01) | 0.95 (0.90-1.01) | 0.99 (0.95-1.04) | 0.99 (0.94-1.05) |
|  |  |  |  |  |  |  |  |  |
| **Blood pressure** |  |  |  |  |  |  |  |  |
| Normal | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| High | 0.99 (0.96-1.02) | 1.00 (0.97-1.04) | 0.99 (0.97-1.02) | 0.99 (0.95-1.03) | 1.00 (0.97-1.03) | 1.00 (0.97-1.04) | 1.02 (0.99-1.05) | 1.02 (0.98-1.06) |
|  |  |  |  |  |  |  |  |  |
| ***Co-morbidities*** |  |  |  |  |  |  |  |  |
| Respiratory disease ex asthma | 0.95 (0.80-1.14) | 0.95 (0.80-1.14) | 0.95 (0.79-1.13) | 0.94 (0.79-1.13) | 0.91 (0.76-1.09) | 0.92 (0.77-1.10) | 0.96 (0.80-1.14) | 0.95 (0.79-1.13) |
| Asthma | 1.68 (1.01-2.78) | 1.62 (0.98-2.70) | 0.81 (0.41-1.62) | 0.79 (0.39-1.58) | 1.01 (0.54-1.88) | 1.00 (0.54-1.85) | 0.41 (0.15-1.09) | 0.42 (0.16-1.11) |
| Chronic heart disease | 0.97 (0.93-1.00) | 0.93 (0.85-1.03) | 1.00 (0.96-1.04) | 1.02 (0.93-1.12) | 1.00 (0.96-1.04) | 0.99 (0.90-1.09) | 1.02 (0.98-1.06) | 0.99 (0.90-1.09) |
| Diabetes | 1.00 (0.96-1.03) | 1.04 (0.98-1.10) | 1.01 (0.97-1.04) | 1.03 (0.98-1.09) | 1.01 (0.98-1.05) | 1.03 (0.97-1.09) | 1.00 (0.97-1.04) | 0.98 (0.93-1.04) |
| Cancer ex haem (in last year) | 1.01 (0.97-1.04) | 1.01 (0.97-1.04) | 0.99 (0.96-1.03) | 0.99 (0.96-1.03) | 0.96 (0.93-1.00) | 0.96 (0.93-1.00) | 1.00 (0.97-1.04) | 1.00 (0.97-1.04) |
| Canc haem/ apl anaem /bone mrrw transpl  (last yr) | 1.00 (0.97-1.04) | 1.00 (0.97-1.04) | 1.02 (0.98-1.05) | 1.02 (0.98-1.05) | 0.98 (0.95-1.02) | 0.98 (0.95-1.02) | 1.00 (0.96-1.03) | 0.99 (0.96-1.03) |
| Liver disease | 1.00 (0.94-1.07) | 0.86 (0.69-1.06) | 0.98 (0.92-1.05) | 0.98 (0.78-1.23) | 1.01 (0.94-1.08) | 0.98 (0.79-1.23) | 1.05 (0.98-1.13) | 1.03 (0.83-1.29) |
| Stroke/  dementia | 1.02 (0.95-1.09) | 1.18 (0.97-1.44) | 0.98 (0.92-1.04) | 0.97 (0.79-1.20) | 1.01 (0.94-1.08) | 1.02 (0.83-1.25) | 1.05 (0.99-1.12) | 1.06 (0.87-1.30) |
| Other neurological | 0.82 (0.62-1.09) | 0.81 (0.61-1.09) | 0.98 (0.75-1.28) | 0.95 (0.72-1.25) | 0.89 (0.67-1.17) | 0.88 (0.66-1.16) | 1.06 (0.82-1.37) | 1.04 (0.80-1.35) |
| Kidney disease | 1.03 (0.97-1.10) | 1.03 (0.97-1.10) | 0.99 (0.93-1.06) | 1.00 (0.94-1.06) | 0.97 (0.91-1.03) | 0.97 (0.91-1.03) | 0.98 (0.91-1.04) | 0.98 (0.92-1.05) |
| Organ transplant | 0.99 (0.93-1.05) | 0.99 (0.93-1.06) | 1.01 (0.94-1.07) | 1.00 (0.94-1.07) | 1.06 (1.00-1.13) | 1.06 (0.99-1.12) | 0.97 (0.91-1.03) | 0.97 (0.91-1.04) |
| Spleen diseases | 0.95 (0.90-1.00) | 1.02 (0.90-1.15) | 1.00 (0.95-1.06) | 0.96 (0.85-1.08) | 1.00 (0.95-1.05) | 0.96 (0.85-1.08) | 1.01 (0.96-1.06) | 1.00 (0.88-1.13) |
| Rheumatoid/Lupus/ Psoriasis | 1.00 (0.85-1.19) | 0.98 (0.83-1.18) | 0.97 (0.82-1.16) | 0.96 (0.81-1.15) | 0.80 (0.66-0.97) | 0.81 (0.67-0.99) | 1.02 (0.86-1.21) | 1.02 (0.86-1.21) |
| Endocrine disease | (later) |  |  |  |  |  |  |  |
| **Immunosuppression not classified elsewhere** | (later) |  |  |  |  |  |  |  |

**GREY HIGHLIGHT = DUMMY DATA - NOT REAL; YELLOW HIGHLIGHT = YET TO BE IMPLEMENTED**

FOOTNOTES: Ethnicity/BMI from a CC model? Adjustment for age slpine?