**Supplementary materials**

**Supplementary Material 4.** Relative risk of COVID-19 fatality per interquartile range increment of the level of area deprivation indices

| Area deprivation index | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| | RR† | 95% CI | RR† | 95% CI | RR† | 95% CI |
| Composite deprivation index | 1.37 | (1.05–1.77)* | 1.42 | (1.11–1.80)* | 1.45 | (1.11–1.80)* |
| Economic deprivation index | 1.23 | (0.94–1.60) | 1.29 | (0.90–1.85) | 1.34 | (0.90–1.86) |
| Social deprivation index | 1.34 | (0.99–1.78) | 1.39 | (1.00–1.84)* | 1.42 | (1.06–1.85)* |
| Deprivation index of factors related to mortality | 1.32 | (1.03–1.68)* | 1.34 | (1.09–1.65)* | 1.40 | (1.09–1.66)* |

RR, relative risk; CI, confidence interval. *$P$-value <0.05. Model 1: crude model; model 2: adjusted with the level of standardized prevalence of hypertension; and model 3: model 2 + adjusted with the standardized prevalence of diabetes.