

## Supplementary Material

**Title of manuscript: Morbidity and mortality outcomes of COVID-19 patients with and without hypertension in Lagos, Nigeria: A retrospective cohort study**

**Table 1: Cox regression for risk of death among patients with hypertension compared with patients without hypertension.** (adjusting for Age, sex, diabetes mellitus, renal diseases, HIV/HBV co-infection, asthma, other cardiovascular diseases and cancer)

|                    | Unadjusted |             |       | Adjusted |            |       |
|--------------------|------------|-------------|-------|----------|------------|-------|
|                    | HR         | 95% CI      | p     | aHR      | 95% CI     | p     |
| Hypertension       | 6.51       | 4.1 – 10.3  | 0.001 | 1.99     | 1.2 - 3.4  | 0.013 |
| Sex (male/female)  | 1.71       | 0.9 – 2.9   | 0.051 | 1.59     | 0.9 - 2.8  | 0.099 |
| Diabetes Mellitus  | 8.47       | 5.2 – 13.7  | 0.001 | 2.93     | 1.7 – 5.0  | 0.001 |
| Asthma             | 2.06       | 0.6 – 6.5   | 0.218 | 1.75     | 0.5 - 5.7  | 0.354 |
| Cancer             | 9.30       | 2.9 – 29.6  | 0.001 | 8.58     | 2.5 – 29.1 | 0.001 |
| Renal Disease      | 15.19      | 5.5 – 41.7  | 0.001 | 3.65     | 1.2 - 10.8 | 0.020 |
| Other CVS diseases | 5.57       | 1.3 – 22.7  | 0.017 | 0.77     | 0.2 - 3.5  | 0.736 |
| HIV-HBV            | 6.62       | 2.1 – 21.1  |       | 7.08     | 2.2 – 23.1 | 0.001 |
| Age Group(years)   |            |             |       |          |            |       |
| < 40 <sup>R</sup>  |            |             |       | 1        |            |       |
| 40-49              | 1.77       | 0.7 – 4.3   | 0.216 | 1.18     | 0.5 - 3.0  | 0.730 |
| 50-59              | 6.91       | 3.2 – 14.9  | 0.001 | 3.66     | 1.6 - 8.4  | 0.002 |
| >-60               | 21.21      | 10.5 – 42.9 | 0.001 | 8.67     | 3.8 - 19.5 | 0.001 |

R= reference group, HR = Hazard ratio aHR=Adjusted hazard ratio

**Table 2: Distribution of comorbidities in patients with and without hypertension**

| Variable                             | Hypertensive      |                    | Total              | X <sup>2</sup> | p-value |
|--------------------------------------|-------------------|--------------------|--------------------|----------------|---------|
|                                      | Yes               | No                 |                    |                |         |
| <b>Diabetes Mellitus</b>             |                   |                    |                    | 228.79         | 0.001   |
| Yes                                  | 95(25.7)          | 55(3.2)            | 150(7.2)           |                |         |
| No                                   | 274(74.3)         | 1647(96.8)         | 1921(92.8)         |                |         |
| <b>Total</b>                         | <b>369(100.0)</b> | <b>1702(100.0)</b> | <b>2071(100.0)</b> |                |         |
| <b>Asthma</b>                        |                   |                    |                    | 1.051          | 0.305   |
| Yes                                  | 10(2.7)           | 32(1.9)            | 42(2.0)            |                |         |
| No                                   | 359(97.3)         | 1670(98.1)         | 2029(98.0)         |                |         |
| <b>Total</b>                         | <b>369(100.0)</b> | <b>1702(100.0)</b> | <b>2071(100.0)</b> |                |         |
| <b>Cancer</b>                        |                   |                    |                    | 5.077          | 0.036   |
| Yes                                  | 6(1.6)            | 9(0.5)             | 15(0.7)            |                |         |
| No                                   | 363(98.4)         | 1693(99.5)         | 2056(99.3)         |                |         |
| <b>Total</b>                         | <b>369(100.0)</b> | <b>1702(100.0)</b> | <b>2071(100.0)</b> |                |         |
| <b>Renal disease</b>                 |                   |                    |                    | 12.211         | 0.003   |
| Yes                                  | 6(1.6)            | 4(0.2)             | 10(0.5)            |                |         |
| No                                   | 363(98.4)         | 1698(99.8)         | 2061(99.5)         |                |         |
| <b>Total</b>                         | <b>369(100.0)</b> | <b>1702(100.0)</b> | <b>2071(100.0)</b> |                |         |
| <b>Other Cardiovascular diseases</b> |                   |                    |                    | 35.530         | 0.001   |
| Yes                                  | 11(3.0)           | 3(0.2)             | 14(0.7)            |                |         |
| No                                   | 358(97.0)         | 1699(99.8)         | 2057(99.3)         |                |         |
| <b>HIV_HBV Co infection</b>          |                   |                    |                    | 1.283          | 0.494   |
| Yes                                  | 1(0.3)            | 14(0.8)            | 15(0.7)            |                |         |
| No                                   | 368(99.7)         | 1688(99.2)         | 2056(99.3)         |                |         |
| <b>Total</b>                         | <b>369(100.0)</b> | <b>1702(100.0)</b> | <b>2071(100.0)</b> |                |         |