|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | OR | 95% CI | p-value | Adj. OR | 95% CI | P-value |
| SOCIO-DEMOGRAPHICS |  |  |  |  |  |  |
| Age at enrolment, in years | 0.98 | 0.94, 1.02 | 0.3 |  |  |  |
| Female-gender | 1.03 | 0.50, 2.17 | >0.9 |  |  |  |
| Black-Ethnicity | 1.93 | 0.66, 8.23 | 0.3 |  |  |  |
| HISTORY |  |  |  |  |  |  |
| Duration of current illness (pre-10-days) | 0.98 | 0.95, 1.00 | 0.066 | 0.978 | 0.9954, 1.00009 | 0.0599 |
| Tiredness | 0.82 | 0.24, 2.20 | 0.7 |  |  |  |
| Poor appetite | 0.56 | 0.19, 1.39 | 0.3 |  |  |  |
| Weight loss | 1.89 | 0.67, 4.59 | 0.2 |  |  |  |
| Nausea | 0.73 | 0.34, 1.53 | 0.4 |  |  |  |
| Vomiting | 1.09 | 0.49, 2.67 | 0.8 |  |  |  |
| Liking for salt | 0.79 | 0.35, 1.69 | 0.6 |  |  |  |
| Diarrhoea | 1.68 | 0.77, 3.93 | 0.2 |  |  |  |
| Dizziness | 0.89 | 0.42, 1.90 | 0.8 |  |  |  |
| CLINICAL |  |  |  |  |  |  |
| Anorexia | 1.85 | 0.86, 4.34 | 0.13 |  |  |  |
| BP (systolic), mmHg | 1 | 0.98, 1.02 | 0.7 |  |  |  |
| BP (diastolic), mmHg | 0.98 | 0.96, 1.01 | 0.2 |  |  |  |
| Postural drop in blood pressure | 0.47 | 0.12, 3.14 | 0.3 |  |  |  |
| Heart rate, bpm | 1.01 | 0.99, 1.03 | 0.4 |  |  |  |
| Hypotension | 2.49 | 0.50, 45.2 | 0.4 |  |  |  |
| Weakness | 1.25 | 0.45, 3.00 | 0.6 |  |  |  |
| INVESTIGATIONS |  |  |  |  |  |  |
| Increased pigmentation of the skin | 1.32 | 0.61, 2.98 | 0.5 |  |  |  |
| Loss of axillary and pubic hair in female | 2.04 | 0.63, 9.12 | 0.3 |  |  |  |
| Random morning cortisol, nmol/L | **1.18** | **1.13, 1.25** | **<0.001** |  |  |  |
| Basal cortisol, nnol/L | **1.10** | **1.06, 1.15** | **<0.001** |  |  |  |
| Stimulated cortisol, nmo/L | **1.34** | **1.20, 1.59** | **<0.001** |  |  |  |
| ACTH, pmol/L | 1 | 0.99, 1.00 | 0.2 |  |  |  |
| Presence of anemia | 1.24 | 0.58, 2.62 | 0.6 |  |  |  |
| Viral load, log10 Copies/mL | 0.88 | 0.40, 1.74 | 0.7 |  |  |  |
| Total CD4 count, Cells/mL | 1 | 0.99, 1.02 | 0.8 |  |  |  |
| Sodium, mmol/L | 0.85 | 0.68, 1.09 | 0.2 |  |  |  |
| Potassium, mmol/L | 1 | 0.76, 1.76 | >0.9 |  |  |  |
| Haemoglobin, g/dL | 1 | 0.99, NA | 0.8 |  |  |  |
| White cell count, x109 | 0.99 | 0.98, 1.02 | 0.5 |  |  |  |
| Lymphocyte count, x109 | 0.82 | 0.54, 1.44 | 0.4 | 0.894 | 0.559, 1.43 | 0.6 |
| Neutrophils | 1.35 | 1.05, 2.52 | 0.2 |  |  |  |
| Early Mortality | 0.49 | 0.15, 1.90 | 0.3 |  |  |  |
| Intermediate mortality | 0.36 | 0.12, 1.15 | 0.071 |  |  |  |
| Late mortality | 0.49 | 0.18, 1.39 | 0.2 |  |  |  |
| Tuberculosis | 1.75 | 0.80, 3.69 | 0.15 | 1.731 | 0.77, 3.892 | 0.1835 |
| Other | **0.47** | **0.22, 1.01** | **0.047** |  |  |  |

At bivariate analysis, only Random cortisol, basal cortisol and stimulated cortisol and Other opportunistic infections, were associated with AI. A 10 nmol/L increase in random cortisol was associated with an 18% increase in the odds of being diagnosed with AI, 1.18 (95%CI:1.13, 1.25). A 10 nmol/L increase in basal cortisol was associated with a 10% increase in the odds of being diagnosed with AI, 1.10 (95%CI:1.06, 1.15), while a 10 nmol/L increase in stimulated cortisol was associated with a 34% increase in the odds of being diagnosed with AI, 1.34 (95%CI:1.20, 1.59).

At multivariate analysis, after adjusting for lymphocyte count, both random morning cortisol and ACTH were associated with AI. A 10 nmol/L increase in random morning cortisol was associated with a 19.6% increase in the odds of being diagnosed with AI, 1.196 (95%CI:1.131, 1.265), while a 10 pmol/L increase in ACTH was associated with a 12.6% reduction in the odds of being diagnosed with AI, 0.874 (95%CI:0.786, 0.971) after adjusting for lymphocyte count

The P-value for eh Kaplan Meier is significant at 0.014 meaning there is a difference in mortality between AI and those without that diagnosis, especially in the late mortality.

