Addison’s disease associated with advanced HIV may explain the high mortality

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Table 2: ARV status

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | **No**, N = 3411 | **Yes**, N = 2071 | **p-value**2 |
| **Age at enrolment** | 36.0 (31.0, 43.0) | 36.0 (32.0, 43.0) | 0.7 |
| **Male gender, n(%)** | 172 (50.4%) | 96 (46.4%) | 0.4 |
| **Black African Ethnicity, n(%)** | 258 (75.7%) | 172 (83.1%) | 0.040 |
| **Duration of current illness, median (IQR) (days)** | 14.0 (12.0, 21.0) | 14.0 (10.0, 21.0) | 0.6 |
| **Weight loss** | 279 (86.6%) | 172 (85.1%) | 0.6 |
| **Viral load;** *log10 copies/ml* | 10.6 (6.2, 12.3) | 10.8 (7.8, 12.3) | 0.5 |
| **Tuberculosis** | 282 (82.7%) | 179 (86.5%) | 0.2 |
| **Cryptococcus neoformans** | 24 (7.0%) | 6 (2.9%) | 0.039 |
| **Pneumonia** | 38 (11.1%) | 24 (11.6%) | 0.9 |
| **Staph aureus** | 1 (0.3%) | 0 (0.0%) | >0.9 |
| **Kaposis sarcoma** | 3 (0.9%) | 3 (1.4%) | 0.7 |
| **Cytomegalovirus** | 1 (0.3%) | 0 (0.0%) | >0.9 |
| **HSV** | 3 (0.9%) | 5 (2.4%) | 0.2 |
| **HepB** | 10 (2.9%) | 8 (3.9%) | 0.6 |
| **Candida** | 23 (6.7%) | 11 (5.3%) | 0.5 |
| **GE/c diff** | 11 (3.2%) | 12 (5.8%) | 0.15 |
| **Parvo B19** | 0 (0.0%) | 1 (0.5%) | 0.4 |
| **Syphilis** | 14 (4.1%) | 3 (1.4%) | 0.082 |
| **B menigitis** | 4 (1.2%) | 2 (1.0%) | >0.9 |
| **UTI / Leptospirosis** | 4 (1.2%) | 3 (1.4%) | >0.9 |
| **PCP** | 5 (1.5%) | 0 (0.0%) | 0.2 |
| **COVID-19** | 2 (0.6%) | 0 (0.0%) | 0.5 |
| **Neurocysticercosis** | 0 (0.0%) | 2 (1.0%) | 0.14 |
| **Total CD4 count** | 32.5 (13.3, 61.8) | 34.0 (16.0, 61.5) | 0.8 |
| **White cell count X109** | 5.2 (3.4, 7.6) | 5.8 (4.0, 8.9) | 0.076 |
| **Lymphocyte count X109** | 0.9 (0.4, 3.9) | 0.7 (0.4, 1.3) | 0.2 |
| **Neutrophils** | 3.7 (1.5, 8.3) | 3.3 (1.7, 7.4) | 0.8 |
| **Kidney medication** | 30 (8.8%) | 22 (10.6%) | 0.5 |
| 1Median (IQR); n (%) | | | |
| 2Wilcoxon rank sum test; Pearson's Chi-squared test; Fisher's exact test | | | |

Table 3: Patient presentation by CD4 count category.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | **Overall**, N = 5421 | **0 - 33**, N = 2711 | **34 - 66**, N = 1521 | **67 - 100**, N = 1191 | **p-value**2 |
| **Age at enrolment, median (IQR) (years)** | 36.0 (31.3, 43.0) | 35.0 (30.5, 42.0) | 37.0 (32.0, 43.3) | 37.0 (33.0, 46.0) | 0.016 |
| **Gender, n(%)** |  |  |  |  | 0.3 |
| Female | 277 (51.2%) | 137 (50.6%) | 85 (55.9%) | 55 (46.6%) |  |
| Male | 264 (48.8%) | 134 (49.4%) | 67 (44.1%) | 63 (53.4%) |  |
| **Ethnicity, n(%)** |  |  |  |  | 0.3 |
| Black African | 426 (78.6%) | 220 (81.2%) | 117 (77.0%) | 89 (74.8%) |  |
| Other | 116 (21.4%) | 51 (18.8%) | 35 (23.0%) | 30 (25.2%) |  |
| **Duration of current illness, median (IQR) (days)** | 14.0 (12.0, 21.0) | 14.0 (14.0, 21.0) | 14.0 (12.5, 22.5) | 14.0 (7.0, 21.0) | 0.036 |
| **Weight loss** | 452 (86.4%) | 231 (87.5%) | 129 (87.2%) | 92 (82.9%) | 0.5 |
| **log10 viral load** | 10.8 (7.3, 12.3) | 11.6 (9.3, 12.8) | 8.9 (6.5, 12.2) | 7.3 (3.9, 10.6) | <0.001 |
| **Tuberculosis** | 459 (84.7%) | 230 (84.9%) | 131 (86.2%) | 98 (82.4%) | 0.7 |
| **Cryptococcus neoformans** | 30 (5.5%) | 16 (5.9%) | 5 (3.3%) | 9 (7.6%) | 0.3 |
| **Pneumonia** | 62 (11.4%) | 30 (11.1%) | 19 (12.5%) | 13 (10.9%) | 0.9 |
| **Staph aureus** | 1 (0.2%) | 1 (0.4%) | 0 (0.0%) | 0 (0.0%) | >0.9 |
| **Kaposis sarcoma** | 6 (1.1%) | 6 (2.2%) | 0 (0.0%) | 0 (0.0%) | 0.055 |
| **Cytomegalovirus** | 1 (0.2%) | 0 (0.0%) | 1 (0.7%) | 0 (0.0%) | 0.5 |
| **HSV** | 8 (1.5%) | 3 (1.1%) | 4 (2.6%) | 1 (0.8%) | 0.4 |
| **HepB** | 18 (3.3%) | 9 (3.3%) | 8 (5.3%) | 1 (0.8%) | 0.13 |
| **Candida** | 34 (6.3%) | 21 (7.7%) | 11 (7.2%) | 2 (1.7%) | 0.064 |
| **GE/c diff** | 23 (4.2%) | 12 (4.4%) | 7 (4.6%) | 4 (3.4%) | 0.9 |
| **Parvo B19** | 1 (0.2%) | 0 (0.0%) | 1 (0.7%) | 0 (0.0%) | 0.5 |
| **Syphilis** | 16 (3.0%) | 8 (3.0%) | 7 (4.6%) | 1 (0.8%) | 0.2 |
| **B menigitis** | 6 (1.1%) | 3 (1.1%) | 1 (0.7%) | 2 (1.7%) | 0.8 |
| **UTI / Leptospirosis** | 7 (1.3%) | 4 (1.5%) | 0 (0.0%) | 3 (2.5%) | 0.13 |
| **PCP** | 5 (0.9%) | 4 (1.5%) | 1 (0.7%) | 0 (0.0%) | 0.5 |
| **COVID-19** | 2 (0.4%) | 1 (0.4%) | 1 (0.7%) | 0 (0.0%) | >0.9 |
| **Neurocysticercosis** | 2 (0.4%) | 1 (0.4%) | 1 (0.7%) | 0 (0.0%) | >0.9 |
| **White cell count X109** | 5.4 (3.7, 8.1) | 5.0 (2.9, 7.4) | 5.8 (4.2, 8.4) | 6.8 (4.5, 9.7) | <0.001 |
| **Lymphocyte count X109** | 0.8 (0.4, 1.9) | 0.6 (0.3, 1.3) | 0.9 (0.5, 5.8) | 1.3 (0.8, 3.0) | 0.011 |
| **Neutrophils** | 3.6 (1.5, 8.3) | 2.4 (1.0, 5.9) | 6.6 (2.8, 15.7) | 5.1 (2.9, 11.5) | 0.002 |
| **ART exposure** | 207 (38.2%) | 101 (37.3%) | 62 (40.8%) | 44 (37.0%) | 0.7 |
| **Kidney medication** | 52 (9.6%) | 27 (10.0%) | 16 (10.5%) | 9 (7.6%) | 0.7 |
| 1Median (IQR); n (%) | | | | | |
| 2Kruskal-Wallis rank sum test; Pearson's Chi-squared test; Fisher's exact test | | | | | |

# Table 2: comparing Addisons status with other variables

Table 2: Should compare Total AI with Non-AI patients

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Non-AI vs AI** | | | **PAI vs SAI patients** | | |
| Variable | **no-AI**, N = 5221 | **AI**, N = 271 | **p-value**2 | **SAI**, N = 201 | **PAI**, N = 71 | **p-value**3 |
| **Age at enrolment, median (IQR) (years)** | 36.0 (31.8, 43.0) | 36.0 (32.0, 47.5) | 0.4 | 36.0 (32.0, 48.5) | 40.0 (35.0, 45.0) | 0.6 |
| **Gender, n(%)** |  |  | >0.9 |  |  | 0.7 |
| Female | 266 (51.1%) | 14 (51.9%) |  | 11 (55.0%) | 3 (42.9%) |  |
| Male | 255 (48.9%) | 13 (48.1%) |  | 9 (45.0%) | 4 (57.1%) |  |
| **Ethnicity, n(%)** |  |  | 0.4 |  |  | >0.9 |
| Black African | 407 (78.0%) | 23 (85.2%) |  | 17 (85.0%) | 6 (85.7%) |  |
| Other | 115 (22.0%) | 4 (14.8%) |  | 3 (15.0%) | 1 (14.3%) |  |
| **Duration of current illness, median (IQR) (days)** | 14.0 (11.8, 21.0) | 14.0 (14.0, 27.8) | 0.4 | 21.0 (14.0, 30.0) | 10.0 (7.0, 12.5) | 0.019 |
| **Weight loss** | 430 (86.3%) | 22 (81.5%) | 0.4 | 15 (75.0%) | 7 (100.0%) | 0.3 |
| **Viral load (log10 Copies/mL)** | 10.8 (7.1, 12.3) | 11.0 (10.7, 11.3) | 0.9 | 10.5 (10.5, 10.5) | 11.6 (11.6, 11.6) | >0.9 |
| **Tuberculosis** | 440 (84.3%) | 21 (77.8%) | 0.4 | 16 (80.0%) | 5 (71.4%) | 0.6 |
| **Cryptococcus neoformans** | 20 (3.8%) | 10 (37.0%) | <0.001 | 7 (35.0%) | 3 (42.9%) | >0.9 |
| **Pneumonia** | 59 (11.3%) | 3 (11.1%) | >0.9 | 3 (15.0%) | 0 (0.0%) | 0.5 |
| **Staph aureus** | 0 (0.0%) | 1 (3.7%) | 0.049 | 1 (5.0%) | 0 (0.0%) | >0.9 |
| **Kaposis sarcoma** | 5 (1.0%) | 1 (3.7%) | 0.3 | 1 (5.0%) | 0 (0.0%) | >0.9 |
| **Cytomegalovirus** | 0 (0.0%) | 1 (3.7%) | 0.049 | 1 (5.0%) | 0 (0.0%) | >0.9 |
| **HSV** | 7 (1.3%) | 1 (3.7%) | 0.3 | 1 (5.0%) | 0 (0.0%) | >0.9 |
| **HepB** | 16 (3.1%) | 2 (7.4%) | 0.2 | 2 (10.0%) | 0 (0.0%) | >0.9 |
| **Candida** | 33 (6.3%) | 1 (3.7%) | >0.9 | 1 (5.0%) | 0 (0.0%) | >0.9 |
| **GE/c diff** | 23 (4.4%) | 0 (0.0%) | 0.6 | 0 (0.0%) | 0 (0.0%) |  |
| **Parvo B19** | 0 (0.0%) | 1 (3.7%) | 0.049 | 0 (0.0%) | 1 (14.3%) | 0.3 |
| **Syphilis** | 17 (3.3%) | 0 (0.0%) | >0.9 | 0 (0.0%) | 0 (0.0%) |  |
| **B menigitis** | 6 (1.1%) | 0 (0.0%) | >0.9 | 0 (0.0%) | 0 (0.0%) |  |
| **UTI / Leptospirosis** | 7 (1.3%) | 0 (0.0%) | >0.9 | 0 (0.0%) | 0 (0.0%) |  |
| **PCP** | 5 (1.0%) | 0 (0.0%) | >0.9 | 0 (0.0%) | 0 (0.0%) |  |
| **COVID-19** | 2 (0.4%) | 0 (0.0%) | >0.9 | 0 (0.0%) | 0 (0.0%) |  |
| **Neurocysticercosis** | 2 (0.4%) | 0 (0.0%) | >0.9 | 0 (0.0%) | 0 (0.0%) |  |
| **Total CD4 count** | 34.0 (15.0, 63.0) | 28.0 (13.5, 49.5) | 0.4 | 19.0 (10.0, 48.8) | 46.0 (25.5, 61.0) | 0.2 |
| **White cell count X109** | 5.6 (3.8, 8.1) | 5.2 (2.8, 8.9) | 0.5 | 5.3 (2.8, 11.9) | 3.5 (3.0, 5.5) | 0.4 |
| **Lymphocyte count X109** | 0.8 (0.4, 2.0) | 0.9 (0.5, 1.2) | 0.7 | 0.7 (0.5, 1.0) | 1.3 (1.3, 1.3) | 0.6 |
| **Neutrophils** | 3.8 (1.6, 8.9) | 1.3 (0.9, 1.6) | 0.037 | 1.5 (1.0, 1.7) | 0.9 (0.9, 0.9) | 0.7 |
| **Sodium mmol/L** | 133.0 (130.0, 137.0) | 135.0 (133.0, 137.5) | 0.033 | 135.5 (134.0, 137.3) | 133.0 (131.5, 136.5) | 0.2 |
| **Potassium mmol/L** | 4.1 (3.6, 4.6) | 3.9 (3.3, 4.3) | 0.069 | 4.0 (3.3, 4.5) | 3.6 (3.3, 3.9) | 0.4 |
| **Haemoglobin g/dL** | 8.7 (7.4, 10.3) | 8.7 (7.6, 10.4) | 0.6 | 8.7 (7.6, 10.7) | 10.2 (7.9, 10.3) | 0.7 |
| **BP (systolic)** | 111.0 (102.0, 125.0) | 120.0 (102.5, 128.5) | 0.4 | 118.0 (99.5, 129.3) | 120.0 (120.0, 123.5) | 0.7 |
| **BP (diastolic)** | 70.0 (60.0, 79.0) | 71.0 (66.5, 80.0) | 0.080 | 72.0 (60.0, 80.0) | 70.0 (70.0, 82.0) | 0.8 |
| **Heart rate** | 91.0 (79.0, 108.8) | 87.0 (78.5, 107.0) | 0.7 | 85.0 (76.8, 102.3) | 97.0 (88.0, 111.0) | 0.10 |
| **Hypotension** | 46 (9.3%) | 1 (3.7%) | 0.5 | 1 (5.0%) | 0 (0.0%) | >0.9 |
| **Weakness** | 422 (85.1%) | 21 (77.8%) | 0.3 | 17 (85.0%) | 4 (57.1%) | 0.3 |
| **Tiredness** | 423 (85.1%) | 23 (85.2%) | >0.9 | 18 (90.0%) | 5 (71.4%) | 0.3 |
| **Poor appetite** | 374 (75.9%) | 22 (81.5%) | 0.5 | 16 (80.0%) | 6 (85.7%) | >0.9 |
| **Increased pigmentation of the skin** | 247 (50.8%) | 9 (37.5%) | 0.2 | 6 (31.6%) | 3 (60.0%) | 0.3 |
| **Nausea** | 263 (53.0%) | 16 (59.3%) | 0.5 | 11 (55.0%) | 5 (71.4%) | 0.7 |
| **Vomiting** | 137 (27.7%) | 8 (29.6%) | 0.8 | 4 (20.0%) | 4 (57.1%) | 0.14 |
| **Liking for salt** | 262 (53.0%) | 19 (70.4%) | 0.078 | 14 (70.0%) | 5 (71.4%) | >0.9 |
| **Hypoglycaemia** | 11 (2.2%) | 0 (0.0%) | >0.9 | 0 (0.0%) | 0 (0.0%) |  |
| **Loss of consciousness** | 7 (1.4%) | 0 (0.0%) | >0.9 | 0 (0.0%) | 0 (0.0%) |  |
| **Diarrhoea** | 219 (44.5%) | 8 (29.6%) | 0.13 | 7 (35.0%) | 1 (14.3%) | 0.6 |
| **Dizziness** | 236 (47.8%) | 13 (50.0%) | 0.8 | 9 (45.0%) | 4 (66.7%) | 0.6 |
| **Shock** | 5 (1.0%) | 0 (0.0%) | >0.9 | 0 (0.0%) | 0 (0.0%) |  |
| **Anorexia** | 234 (47.3%) | 8 (29.6%) | 0.073 | 4 (20.0%) | 4 (57.1%) | 0.14 |
| **Loss of axillary and pubic hair, if female** |  |  | 0.5 |  |  | 0.8 |
| No | 159 (31.7%) | 11 (40.7%) |  | 9 (45.0%) | 2 (28.6%) |  |
| Not applicable | 248 (49.4%) | 13 (48.1%) |  | 9 (45.0%) | 4 (57.1%) |  |
| Yes | 95 (18.9%) | 3 (11.1%) |  | 2 (10.0%) | 1 (14.3%) |  |
| **Any postural drop in blood pressure** | 21 (4.3%) | 2 (7.4%) | 0.3 | 2 (10.0%) | 0 (0.0%) | >0.9 |
| **Presence of anaemia** | 290 (58.8%) | 13 (50.0%) | 0.4 | 9 (47.4%) | 4 (57.1%) | >0.9 |
| **mortality** | 60 (43.5%) | 6 (50.0%) | 0.7 | 4 (44.4%) | 2 (66.7%) | >0.9 |
| **ART exposure** | 201 (38.5%) | 6 (22.2%) | 0.089 | 4 (20.0%) | 2 (28.6%) | 0.6 |
| **Kidney medication** | 47 (9.0%) | 5 (18.5%) | 0.2 | 3 (15.0%) | 2 (28.6%) | 0.6 |
| 1Median (IQR); n (%); 2Wilcoxon rank sum test; Pearson's Chi-squared test; Fisher's exact test; 3Wilcoxon rank sum test; Fisher's Exact Test for Count Data; Wilcoxon rank sum exact test; Fisher's Exact Test for Count Data with simulated p-value  (based on 2000 replicates) | | | | | | |

# Table 3a: Deep dive on Addison’s disease patients

Mortality: Non-AI vs AI

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Mortality: Non-AI vs AI** | | | **Mortality among only Addison disease patients** | | |
| Variable | **1**, N = 601 | **2**, N = 61 | **p-value**2 | **Alive**, N = 211 | **Died**, N = 61 | **p-value**2 |
| **Age at enrolment, median (IQR) (years)** | 38 (33, 44) | 41 (33, 46) | 0.6 |  |  |  |
| **Gender, n(%)** |  |  | >0.9 |  |  | >0.9 |
| Female | 32 (53.3%) | 3 (50.0%) |  | 11 (52.4%) | 3 (50.0%) |  |
| Male | 28 (46.7%) | 3 (50.0%) |  | 10 (47.6%) | 3 (50.0%) |  |
| **Ethnicity, n(%)** |  |  | 0.2 |  |  | 0.2 |
| Black African | 52 (86.7%) | 4 (66.7%) |  | 19 (90.5%) | 4 (66.7%) |  |
| Other | 8 (13.3%) | 2 (33.3%) |  | 2 (9.5%) | 2 (33.3%) |  |
| **Duration of current illness, median (IQR) (days)** | 14 (14, 21) | 14 (11, 14) | 0.079 | 1,146.0 (281.5, 3,326.0) | 122.5 (7.5, 4,205.0) | 0.5 |
| **Weight loss** | 51 (87.9%) | 4 (66.7%) | 0.2 | 18 (85.7%) | 4 (66.7%) | 0.3 |
| **Viral load (log10 Copies/mL)** | 11.74 (9.55, 13.08) | NA (NA, NA) |  |  |  | >0.9 |
| 10.4579184937828 |  |  |  | 1 (50.0%) | 0 (NA%) |  |
| 11.60516730587 |  |  |  | 1 (50.0%) | 0 (NA%) |  |
| **Tuberculosis** | 49 (81.7%) | 5 (83.3%) | >0.9 | 16 (76.2%) | 5 (83.3%) | >0.9 |
| **Cryptococcus neoformans** | 3 (5.0%) | 3 (50.0%) | 0.008 | 7 (33.3%) | 3 (50.0%) | 0.6 |
| **Pneumonia** | 7 (11.7%) | 0 (0.0%) | >0.9 | 3 (14.3%) | 0 (0.0%) | >0.9 |
| **Staph aureus** | 0 (0.0%) | 0 (0.0%) |  | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Kaposis sarcoma** | 0 (0.0%) | 0 (0.0%) |  | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Cytomegalovirus** | 0 (0.0%) | 0 (0.0%) |  | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **HSV** | 1 (1.7%) | 0 (0.0%) | >0.9 | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **HepB** | 0 (0.0%) | 1 (16.7%) | 0.091 | 1 (4.8%) | 1 (16.7%) | 0.4 |
| **Candida** | 4 (6.7%) | 0 (0.0%) | >0.9 | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Parvo B19** | 0 (0.0%) | 0 (0.0%) |  | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Total CD4 count** | 28 (14, 55) | 30 (16, 45) | 0.7 | 28.0 (11.0, 51.0) | 30.0 (15.5, 45.3) | 0.8 |
| **White cell count X109** | 5.2 (3.4, 7.4) | 8.3 (4.3, 27.5) | 0.2 | 4.2 (2.5, 6.5) | 8.3 (4.3, 27.5) | 0.2 |
| **Lymphocyte count X109** | 0.84 (0.41, 1.22) | - |  | 0.880 (0.545,  1.205) |  | >0.9 |
| **Neutrophils** | 2 (1, 5) | - |  |  |  |  |
| **Sodium mmol/L** | 133.0 (128.0, 136.0) | 136.5 (133.3, 139.0) | 0.15 | 135.0 (133.0, 137.0) | 136.5 (133.3, 139.0) | 0.6 |
| **Potassium mmol/L** | 3.95 (3.60, 4.57) | 3.70 (3.37, 3.88) | 0.077 | 4.0 (3.3, 4.6) | 3.7 (3.4, 3.9) | 0.3 |
| **Haemoglobin g/dL** | 8.20 (7.00, 9.63) | 9.60 (8.25, 10.95) | 0.3 | 8.6 (7.6, 10.3) | 9.6 (8.3, 11.0) | 0.5 |
| **BP (systolic)** | 110 (102, 120) | 128 (122, 130) | 0.059 | 120.0 (100.0, 128.0) | 127.5 (121.8, 129.5) | 0.2 |
| **BP (diastolic)** | 71 (67, 80) | 74 (65, 78) | 0.8 | 71.0 (70.0, 80.0) | 73.5 (65.0, 78.3) | 0.8 |
| **Heart rate** | 91 (82, 108) | 87 (72, 98) | 0.3 | 87.0 (80.0, 114.0) | 87.0 (71.5, 98.0) | 0.4 |
| **Hypotension** | 7 (12.1%) | 0 (0.0%) | >0.9 | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Weakness** | 54 (93.1%) | 4 (66.7%) | 0.093 | 17 (81.0%) | 4 (66.7%) | 0.6 |
| **Tiredness** | 53 (93.0%) | 6 (100.0%) | >0.9 | 17 (81.0%) | 6 (100.0%) | 0.5 |
| **Poor appetite** | 51 (87.9%) | 6 (100.0%) | >0.9 | 16 (76.2%) | 6 (100.0%) | 0.6 |
| **Increased pigmentation of the skin** | 36 (63.2%) | 2 (40.0%) | 0.4 | 7 (36.8%) | 2 (40.0%) | >0.9 |
| **Nausea** | 37 (63.8%) | 5 (83.3%) | 0.7 | 11 (52.4%) | 5 (83.3%) | 0.3 |
| **Vomiting** | 15 (25.9%) | 2 (33.3%) | 0.7 | 6 (28.6%) | 2 (33.3%) | >0.9 |
| **Liking for salt** | 38 (65.5%) | 4 (66.7%) | >0.9 | 15 (71.4%) | 4 (66.7%) | >0.9 |
| **Diarrhoea** | 33 (56.9%) | 1 (16.7%) | 0.090 | 7 (33.3%) | 1 (16.7%) | 0.6 |
| **Dizziness** | 34 (59.6%) | 3 (50.0%) | 0.7 | 10 (50.0%) | 3 (50.0%) | >0.9 |
| **Anorexia** | 35 (60.3%) | 2 (33.3%) | 0.2 | 6 (28.6%) | 2 (33.3%) | >0.9 |
| **Loss of axillary and pubic hair, if female** | 19 (33.3%) | 1 (16.7%) | 0.8 | 2 (9.5%) | 1 (16.7%) | >0.9 |
| **Any postural drop in blood pressure** | 4 (7.0%) | 0 (0.0%) | >0.9 | 2 (9.5%) | 0 (0.0%) | >0.9 |
| **Presence of anaemia** | 38 (65.5%) | 3 (50.0%) | 0.7 | 10 (50.0%) | 3 (50.0%) | >0.9 |
| **ART exposure** | 26 (43.3%) | 1 (16.7%) | 0.4 | 5 (23.8%) | 1 (16.7%) | >0.9 |
| **Kidney medication** | 10 (16.7%) | 1 (16.7%) | >0.9 | 4 (19.0%) | 1 (16.7%) | >0.9 |
| **incremental cortisol** | 243 (182, 344) | 41 (19, 93) | 0.003 | 122.0 (63.0, 194.0) | 41.0 (19.3, 92.8) | 0.14 |
| **Age at enrolment median (IQR) (years)** |  |  |  | 36.0 (33.0, 47.0) | 40.5 (33.3, 46.3) | 0.9 |
| **Random cortisol** |  |  |  | 338.0 (237.0, 383.0) | 306.5 (261.5, 335.8) | 0.9 |
| **Basal cortisol** |  |  |  | 284.0 (181.0, 350.0) | 308.0 (246.3, 364.5) | 0.5 |
| **Stimulated cortisol** |  |  |  | 379.0 (311.0, 463.0) | 375.0 (338.0, 424.0) | 0.9 |
| **ACTH** |  |  |  | 27.2 (22.3, 64.1) | 42.4 (25.7, 77.7) | 0.6 |
| **Addisons disease** |  |  |  |  |  | 0.6 |
| PAI |  |  |  | 5 (23.8%) | 2 (33.3%) |  |
| SAI |  |  |  | 16 (76.2%) | 4 (66.7%) |  |
| 1Median (IQR); n (%); 2Wilcoxon rank sum test; Fisher's exact test; Wilcoxon rank sum exact test | | | | | | |

Mortality: Non-AI vs AI

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | **1**, N = 601 | **2**, N = 61 | **p-value**2 |
| **Age at enrolment, median (IQR) (years)** | 38 (33, 44) | 41 (33, 46) | 0.6 |
| **Gender, n(%)** |  |  | >0.9 |
| Female | 32 (53.3%) | 3 (50.0%) |  |
| Male | 28 (46.7%) | 3 (50.0%) |  |
| **Ethnicity, n(%)** |  |  | 0.2 |
| Black African | 52 (86.7%) | 4 (66.7%) |  |
| Other | 8 (13.3%) | 2 (33.3%) |  |
| **Duration of current illness, median (IQR) (days)** | 14 (14, 21) | 14 (11, 14) | 0.079 |
| **Weight loss** | 51 (87.9%) | 4 (66.7%) | 0.2 |
| **Viral load (log10 Copies/mL)** | 11.74 (9.55, 13.08) | - |  |
| **Tuberculosis** | 49 (81.7%) | 5 (83.3%) | >0.9 |
| **Cryptococcus neoformans** | 3 (5.0%) | 3 (50.0%) | 0.008 |
| **Pneumonia** | 7 (11.7%) | 0 (0.0%) | >0.9 |
| **Staph aureus** | 0 (0.0%) | 0 (0.0%) |  |
| **Kaposis sarcoma** | 0 (0.0%) | 0 (0.0%) |  |
| **Cytomegalovirus** | 0 (0.0%) | 0 (0.0%) |  |
| **HSV** | 1 (1.7%) | 0 (0.0%) | >0.9 |
| **HepB** | 0 (0.0%) | 1 (16.7%) | 0.091 |
| **Candida** | 4 (6.7%) | 0 (0.0%) | >0.9 |
| **GE/c diff** | 0 (0.0%) | 0 (0.0%) |  |
| **Parvo B19** | 0 (0.0%) | 0 (0.0%) |  |
| **Syphilis** | 3 (5.0%) | 0 (0.0%) | >0.9 |
| **B menigitis** | 1 (1.7%) | 0 (0.0%) | >0.9 |
| **UTI / Leptospirosis** | 1 (1.7%) | 0 (0.0%) | >0.9 |
| **PCP** | 2 (3.3%) | 0 (0.0%) | >0.9 |
| **COVID-19** | 0 (0.0%) | 0 (0.0%) |  |
| **Neurocysticercosis** | 0 (0.0%) | 0 (0.0%) |  |
| **Total CD4 count** | 28 (14, 55) | 30 (16, 45) | 0.7 |
| **White cell count X109** | 5.2 (3.4, 7.4) | 8.3 (4.3, 27.5) | 0.2 |
| **Lymphocyte count X109** | 0.84 (0.41, 1.22) | - |  |
| **Neutrophils** | 2 (1, 5) | - |  |
| **Sodium mmol/L** | 133.0 (128.0, 136.0) | 136.5 (133.3, 139.0) | 0.15 |
| **Potassium mmol/L** | 3.95 (3.60, 4.57) | 3.70 (3.37, 3.88) | 0.077 |
| **Haemoglobin g/dL** | 8.20 (7.00, 9.63) | 9.60 (8.25, 10.95) | 0.3 |
| **BP (systolic)** | 110 (102, 120) | 128 (122, 130) | 0.059 |
| **BP (diastolic)** | 71 (67, 80) | 74 (65, 78) | 0.8 |
| **Heart rate** | 91 (82, 108) | 87 (72, 98) | 0.3 |
| **Hypotension** | 7 (12.1%) | 0 (0.0%) | >0.9 |
| **Weakness** | 54 (93.1%) | 4 (66.7%) | 0.093 |
| **Tiredness** | 53 (93.0%) | 6 (100.0%) | >0.9 |
| **Poor appetite** | 51 (87.9%) | 6 (100.0%) | >0.9 |
| **Increased pigmentation of the skin** | 36 (63.2%) | 2 (40.0%) | 0.4 |
| **Nausea** | 37 (63.8%) | 5 (83.3%) | 0.7 |
| **Vomiting** | 15 (25.9%) | 2 (33.3%) | 0.7 |
| **Liking for salt** | 38 (65.5%) | 4 (66.7%) | >0.9 |
| **Hypoglycaemia** | 2 (3.4%) | 0 (0.0%) | >0.9 |
| **Loss of consciousness** | 2 (3.4%) | 0 (0.0%) | >0.9 |
| **Diarrhoea** | 33 (56.9%) | 1 (16.7%) | 0.090 |
| **Dizziness** | 34 (59.6%) | 3 (50.0%) | 0.7 |
| **Shock** | 2 (3.4%) | 0 (0.0%) | >0.9 |
| **Anorexia** | 35 (60.3%) | 2 (33.3%) | 0.2 |
| **Loss of axillary and pubic hair, if female** |  |  | 0.8 |
| No | 12 (21.1%) | 2 (33.3%) |  |
| Not applicable | 26 (45.6%) | 3 (50.0%) |  |
| Yes | 19 (33.3%) | 1 (16.7%) |  |
| **Any postural drop in blood pressure** | 4 (7.0%) | 0 (0.0%) | >0.9 |
| **Presence of anaemia** | 38 (65.5%) | 3 (50.0%) | 0.7 |
| **ART exposure** | 26 (43.3%) | 1 (16.7%) | 0.4 |
| **Kidney medication** | 10 (16.7%) | 1 (16.7%) | >0.9 |
| 1Median (IQR); n (%); 2Wilcoxon rank sum test; Fisher's exact test | | | |

Table 2.2.2: Mortality among only Addisons disease patients

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | **Alive**, N = 211 | **Died**, N = 61 | **p-value**2 |
| **Age at enrolment median (IQR) (years)** | 36.0 (33.0, 47.0) | 40.5 (33.3, 46.3) | 0.9 |
| **Gender, n(%)** |  |  | >0.9 |
| Female | 11 (52.4%) | 3 (50.0%) |  |
| Male | 10 (47.6%) | 3 (50.0%) |  |
| **Ethnicity, n(%)** |  |  | 0.2 |
| Black African | 19 (90.5%) | 4 (66.7%) |  |
| Other | 2 (9.5%) | 2 (33.3%) |  |
| **Duration of current illness, median (IQR) (days)** | 1,146.0 (281.5, 3,326.0) | 122.5 (7.5, 4,205.0) | 0.5 |
| **Random cortisol** | 338.0 (237.0, 383.0) | 306.5 (261.5, 335.8) | 0.9 |
| **Basal cortisol** | 284.0 (181.0, 350.0) | 308.0 (246.3, 364.5) | 0.5 |
| **Stimulated cortisol** | 379.0 (311.0, 463.0) | 375.0 (338.0, 424.0) | 0.9 |
| **ACTH** | 27.2 (22.3, 64.1) | 42.4 (25.7, 77.7) | 0.6 |
| **BP (systolic)** | 120.0 (100.0, 128.0) | 127.5 (121.8, 129.5) | 0.2 |
| **BP (diastolic)** | 71.0 (70.0, 80.0) | 73.5 (65.0, 78.3) | 0.8 |
| **Heart rate** | 87.0 (80.0, 114.0) | 87.0 (71.5, 98.0) | 0.4 |
| **Hypotension** | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Weakness** | 17 (81.0%) | 4 (66.7%) | 0.6 |
| **Tiredness** | 17 (81.0%) | 6 (100.0%) | 0.5 |
| **Poor appetite** | 16 (76.2%) | 6 (100.0%) | 0.6 |
| **Weight loss** | 18 (85.7%) | 4 (66.7%) | 0.3 |
| **Increased pigmentation of the skin** | 7 (36.8%) | 2 (40.0%) | >0.9 |
| **Nausea** | 11 (52.4%) | 5 (83.3%) | 0.3 |
| **Vomiting** | 6 (28.6%) | 2 (33.3%) | >0.9 |
| **Liking for salt** | 15 (71.4%) | 4 (66.7%) | >0.9 |
| **Diarrhoea** | 7 (33.3%) | 1 (16.7%) | 0.6 |
| **Dizziness** | 10 (50.0%) | 3 (50.0%) | >0.9 |
| **Anorexia** | 6 (28.6%) | 2 (33.3%) | >0.9 |
| **Loss of axillary and pubic hair, if female** | 2 (9.5%) | 1 (16.7%) | >0.9 |
| **Any postural drop in blood pressure** | 2 (9.5%) | 0 (0.0%) | >0.9 |
| **Presence of anaemia** | 10 (50.0%) | 3 (50.0%) | >0.9 |
| **Tuberculosis** | 16 (76.2%) | 5 (83.3%) | >0.9 |
| **Cryptococcus neoformans** | 7 (33.3%) | 3 (50.0%) | 0.6 |
| **Pneumonia** | 3 (14.3%) | 0 (0.0%) | >0.9 |
| **Staph aureus** | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Kaposis sarcoma** | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Cytomegalovirus** | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **HSV** | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **HepB** | 1 (4.8%) | 1 (16.7%) | 0.4 |
| **Candida** | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Parvo B19** | 1 (4.8%) | 0 (0.0%) | >0.9 |
| **Total CD4 count** | 28.0 (11.0, 51.0) | 30.0 (15.5, 45.3) | 0.8 |
| **Sodium mmol/L** | 135.0 (133.0, 137.0) | 136.5 (133.3, 139.0) | 0.6 |
| **Potassium mmol/L** | 4.0 (3.3, 4.6) | 3.7 (3.4, 3.9) | 0.3 |
| **Haemoglobin g/dL** | 8.6 (7.6, 10.3) | 9.6 (8.3, 11.0) | 0.5 |
| **White cell count X109** | 4.2 (2.5, 6.5) | 8.3 (4.3, 27.5) | 0.2 |
| **Lymphocyte count X109** | 0.880 (0.545,  1.205) | 0 | >0.9 |
| **Addisons disease** |  |  | 0.6 |
| PAI | 5 (23.8%) | 2 (33.3%) |  |
| SAI | 16 (76.2%) | 4 (66.7%) |  |
| **ART exposure** | 5 (23.8%) | 1 (16.7%) | >0.9 |
| **Kidney medication** | 4 (19.0%) | 1 (16.7%) | >0.9 |
| 1Median (IQR); n (%) | | | |
| 2Wilcoxon rank sum test; Fisher's exact test; Wilcoxon rank sum exact test | | | |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Characteristic | Bivariate | | | multivariate - Cox PH | | | multivariate - Logistic | | |
| HR1 | 95% CI1 | p-value | HR1 | 95% CI1 | p-value | OR1 | 95% CI1 | p-value |
| Age at enrolment | 1.02 | 0.99, 1.04 | 0.2 |  |  |  |  |  |  |
| Gender | 0.92 | 0.56, 1.49 | 0.7 |  |  |  |  |  |  |
| Black African Ethnicity | 1.59 | 0.8116, 3.117 | 0.176 |  |  |  |  |  |  |
| Random cortisol | 1.00 | 1.00, 1.00 | 0.6 |  |  |  |  |  |  |
| Basal cortisol | 1.00 | 1.00, 1.00 | 0.15 | 1.09 | 1.01, 1.17 | 0.027 | 1.10 | 1.01, 1.19 | 0.022 |
| Stimulated cortisol | 1.00 | 1.00, 1.00 | >0.9 |  |  |  |  |  |  |
| ACTH | 1.01 | 1.00, 1.01 | <0.001 |  |  |  |  |  |  |
| BP systolic | 0.99 | 0.98, 1.01 | 0.3 |  |  |  |  |  |  |
| BP diastolic | 1.02 | 1.00, 1.03 | 0.066 |  |  |  |  |  |  |
| incremental cortisol | 1.00 | 0.99, 1.00 | 0.047 |  |  |  |  |  |  |
| Heart rate | 1.00 | 0.99, 1.02 | 0.5 |  |  |  |  |  |  |
| Hypotension | 1.25 | 0.57, 2.75 | 0.6 |  |  |  |  |  |  |
| Weakness | 1.78 | 0.77, 4.12 | 0.2 |  |  |  |  |  |  |
| Tiredness | 2.67 | 0.97, 7.35 | 0.057 |  |  |  |  |  |  |
| Poor appetite | 2.66 | 1.21, 5.83 | 0.015 |  |  |  |  |  |  |
| Weight loss | 0.98 | 0.48, 1.98 | >0.9 |  |  |  |  |  |  |
| Increased pigmentation of the skin | 1.60 | 0.96, 2.66 | 0.072 |  |  |  |  |  |  |
| Nausea | 1.73 | 1.03, 2.89 | 0.038 |  |  |  |  |  |  |
| Vomiting | 0.95 | 0.55, 1.65 | 0.9 |  |  |  |  |  |  |
| Liking for salt | 1.69 | 1.01, 2.83 | 0.046 |  |  |  |  |  |  |
| Hypoglycaemia | 1.49 | 0.36, 6.07 | 0.6 |  |  |  |  |  |  |
| Loss of consciousness | 2.57 | 0.63, 10.5 | 0.2 |  |  |  |  |  |  |
| Diarrhoea | 1.48 | 0.91, 2.42 | 0.12 |  |  |  |  |  |  |
| Dizziness | 1.59 | 0.96, 2.63 | 0.069 |  |  |  |  |  |  |
| Shock | 3.85 | 0.94, 15.7 | 0.061 |  |  |  |  |  |  |
| Anorexia | 1.62 | 0.99, 2.66 | 0.057 |  |  |  |  |  |  |
| Loss of axillary and pubic hair | 2.62 | 1.32, 5.18 | 0.006 |  |  |  |  |  |  |
| Any postural drop in blood pressure | 1.50 | 0.54, 4.13 | 0.4 |  |  |  |  |  |  |
| Presence of anaemia | 1.28 | 0.77, 2.14 | 0.3 |  |  |  |  |  |  |
| Tuberculosis | 0.84 | 0.45, 1.58 | 0.6 |  |  |  |  |  |  |
| Cryptococcus neoformans | 1.82 | 0.78, 4.21 | 0.2 | 1.98 | 0.85, 4.63 | 0.11 | 2.18 | 0.77, 5.38 | 0.11 |
| Pneumonia | 0.94 | 0.43, 2.06 | 0.9 |  |  |  |  |  |  |
| HSV | 1.00 | 0.14, 7.18 | >0.9 |  |  |  |  |  |  |
| HepB | 0.44 | 0.06, 3.15 | 0.4 |  |  |  |  |  |  |
| Candida | 0.99 | 0.36, 2.73 | >0.9 |  |  |  |  |  |  |
| Syphilis | 1.44 | 0.45, 4.58 | 0.5 |  |  |  |  |  |  |
| B menigitis | 1.41 | 0.20, 10.2 | 0.7 |  |  |  |  |  |  |
| UTI / Leptospirosis | 1.19 | 0.17, 8.61 | 0.9 |  |  |  |  |  |  |
| PCP | 4.24 | 1.04, 17.3 | 0.044 |  |  |  |  |  |  |
| Viral load | 1.19 | 1.01, 1.41 | 0.036 | 1.05 | 0.94, 1.17 | 0.4 | 1.05 | 0.93, 1.18 | 0.4 |
| CD4 count | 0.99 | 0.98, 1.00 | 0.2 | 1.00 | 0.99, 1.01 | 0.7 | 1.00 | 0.99, 1.01 | 0.7 |
| Sodium | 1.00 | 0.98, 1.02 | >0.9 |  |  |  |  |  |  |
| Potassium | 0.98 | 0.94, 1.03 | 0.5 |  |  |  |  |  |  |
| Haemoglobin | 0.97 | 0.87, 1.08 | 0.6 |  |  |  |  |  |  |
| White cell count | 1.00 | 1.00, 1.00 | >0.9 |  |  |  |  |  |  |
| Lymphocyte count | 0.92 | 0.81, 1.05 | 0.2 |  |  |  |  |  |  |
| ART exposure | 1.16 | 0.71, 1.89 | 0.6 |  |  |  |  |  |  |
| Kidney medication | 2.04 | 1.07, 3.91 | 0.030 |  |  |  |  |  |  |
| Addisons disease | 2.11 | 0.91, 4.89 | 0.081 |  |  |  |  |  |  |

Table for n = 146 for incremental cortisol

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Characteristic | Bivariate | | | multivariate - Cox PH | | | multivariate - Logistic | | |
| HR1 | 95% CI1 | p-value | HR1 | 95% CI1 | p-value | OR1 | 95% CI1 | p-value |
| Age at enrolment | 1.02 | 0.99, 1.04 | 0.2 |  |  |  |  |  |  |
| Gender | 0.92 | 0.56, 1.49 | 0.7 |  |  |  |  |  |  |
| Black African Ethnicity | 1.59 | 0.8116, 3.117 | 0.176 |  |  |  |  |  |  |
| Random cortisol | 1.00 | 1.00, 1.00 | 0.6 |  |  |  |  |  |  |
| Basal cortisol | 1.00 | 1.00, 1.00 | 0.15 |  |  |  |  |  |  |
| Stimulated cortisol | 1.00 | 1.00, 1.00 | >0.9 |  |  |  |  |  |  |
| ACTH | 1.01 | 1.00, 1.01 | <0.001 |  |  |  |  |  |  |
| BP systolic | 0.99 | 0.98, 1.01 | 0.3 |  |  |  |  |  |  |
| BP diastolic | 1.02 | 1.00, 1.03 | 0.066 | 1.01 | 0.97, 1.04 | 0.6 | 1.01 | 0.97, 1.05 | 0.6 |
| incremental cortisol | 1.00 | 0.99, 1.00 | 0.047 | 1.00 | 1.0, 1.00 | 0.2 | 1.00 | 0.99, 1.00 | 0.2 |
| Heart rate | 1.00 | 0.99, 1.02 | 0.5 |  |  |  |  |  |  |
| Hypotension | 1.25 | 0.57, 2.75 | 0.6 |  |  |  |  |  |  |
| Weakness | 1.78 | 0.77, 4.12 | 0.2 |  |  |  |  |  |  |
| Tiredness | 2.67 | 0.97, 7.35 | 0.057 |  |  |  |  |  |  |
| Poor appetite | 2.66 | 1.21, 5.83 | 0.015 |  |  |  |  |  |  |
| Weight loss | 0.98 | 0.48, 1.98 | >0.9 |  |  |  |  |  |  |
| Increased pigmentation of the skin | 1.60 | 0.96, 2.66 | 0.072 |  |  |  |  |  |  |
| Nausea | 1.73 | 1.03, 2.89 | 0.038 | 2.14 | 0.89, 5.14 | 0.089 | 2.38 | 0.93, 6.67 | 0.080 |
| Vomiting | 0.95 | 0.55, 1.65 | 0.9 |  |  |  |  |  |  |
| Liking for salt | 1.69 | 1.01, 2.83 | 0.046 |  |  |  |  |  |  |
| Hypoglycaemia | 1.49 | 0.36, 6.07 | 0.6 |  |  |  |  |  |  |
| Loss of consciousness | 2.57 | 0.63, 10.5 | 0.2 |  |  |  |  |  |  |
| Diarrhoea | 1.48 | 0.91, 2.42 | 0.12 |  |  |  |  |  |  |
| Dizziness | 1.59 | 0.96, 2.63 | 0.069 |  |  |  |  |  |  |
| Shock | 3.85 | 0.94, 15.7 | 0.061 |  |  |  |  |  |  |
| Anorexia | 1.62 | 0.99, 2.66 | 0.057 |  |  |  |  |  |  |
| Loss of axillary and pubic hair | 2.62 | 1.32, 5.18 | 0.006 |  |  |  |  |  |  |
| Any postural drop in blood pressure | 1.50 | 0.54, 4.13 | 0.4 |  |  |  |  |  |  |
| Presence of anaemia | 1.28 | 0.77, 2.14 | 0.3 |  |  |  |  |  |  |
| Tuberculosis | 0.84 | 0.45, 1.58 | 0.6 |  |  |  |  |  |  |
| Cryptococcus neoformans | 1.82 | 0.78, 4.21 | 0.2 | 1.36 | 0.40, 4.71 | 0.6 | 1.63 | 0.33, 7.23 | 0.5 |
| Pneumonia | 0.94 | 0.43, 2.06 | 0.9 |  |  |  |  |  |  |
| HSV | 1.00 | 0.14, 7.18 | >0.9 |  |  |  |  |  |  |
| HepB | 0.44 | 0.06, 3.15 | 0.4 |  |  |  |  |  |  |
| Candida | 0.99 | 0.36, 2.73 | >0.9 |  |  |  |  |  |  |
| Syphilis | 1.44 | 0.45, 4.58 | 0.5 |  |  |  |  |  |  |
| B menigitis | 1.41 | 0.20, 10.2 | 0.7 |  |  |  |  |  |  |
| UTI / Leptospirosis | 1.19 | 0.17, 8.61 | 0.9 |  |  |  |  |  |  |
| PCP | 4.24 | 1.04, 17.3 | 0.044 |  |  |  |  |  |  |
| Viral load | 1.19 | 1.01, 1.41 | 0.036 | 1.15 | 0.97, 1.36 | 0.11 | 1.19 | 0.98, 1.47 | 0.10 |
| CD4 count | 0.99 | 0.98, 1.00 | 0.2 |  |  |  |  |  |  |
| Sodium | 1.00 | 0.98, 1.02 | >0.9 |  |  |  |  |  |  |
| Potassium | 0.98 | 0.94, 1.03 | 0.5 |  |  |  |  |  |  |
| Haemoglobin | 0.97 | 0.87, 1.08 | 0.6 |  |  |  |  |  |  |
| White cell count | 1.00 | 1.00, 1.00 | >0.9 |  |  |  |  |  |  |
| Lymphocyte count | 0.92 | 0.81, 1.05 | 0.2 |  |  |  |  |  |  |
| ART exposure | 1.16 | 0.71, 1.89 | 0.6 |  |  |  |  |  |  |
| Kidney medication | 2.04 | 1.07, 3.91 | 0.030 |  |  |  |  |  |  |
| Addisons disease | 2.11 | 0.91, 4.89 | 0.081 |  |  |  |  |  |  |