

HEALTH CONDITIONS IN ADULTS WITH HIV COMPARED WITH THE GENERAL POPULATION: POPULATION-BASED CROSS-SECTIONAL ANALYSIS

APPENDIX

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Table A1. Primary care codes to identify patients with HIV.

| Medcode | Read code | Description |
|---------|-----------|--|
| 2835 | 43C3.11 | HIV positive |
| 23763 | 65QA.00 | AIDS carrier |
| 98966 | 66j..00 | Human immunodeficiency virus monitoring |
| 101191 | 66j0.00 | Human immunodeficiency virus annual review |
| 105040 | 9kl..00 | HIV pos gen health check serv declind - enhanc service admin |
| 111971 | 9kl..11 | HIV positive general health check service declined |
| 108385 | 9mN..00 | Human immunodeficiency virus infection monitoring invitation |
| 109327 | 9mN0.00 | HIV infection monitoring telephone invitation |
| 111972 | 9mN0000 | HIV infection monitoring first telephone invitation |
| 111973 | 9mN0100 | HIV infection monitoring second telephone invitation |
| 111974 | 9mN0200 | HIV infection monitoring third telephone invitation |
| 23770 | A788.00 | Acquired immune deficiency syndrome |
| 9130 | A788.11 | Human immunodeficiency virus infection |
| 58857 | A788000 | Acute human immunodeficiency virus infection |
| 58859 | A788100 | Asymptomatic human immunodeficiency virus infection |
| 69766 | A788200 | HIV infection with persistent generalised lymphadenopathy |
| 70869 | A788300 | Human immunodeficiency virus with constitutional disease |
| 53636 | A788400 | Human immunodeficiency virus with neurological disease |
| 70528 | A788500 | Human immunodeficiency virus with secondary infection |
| 101836 | A788600 | Human immunodeficiency virus with secondary cancers |
| 101836 | A788600 | Human immunodeficiency virus with secondary cancers |
| 47632 | A788U00 | HIV disease result/haematological+immunologic abnorms |
| 111979 | A788V00 | HIV disease resulting in multiple diseases CE |
| 111979 | A788V00 | HIV disease resulting in multiple diseases CE |
| 67575 | A788W00 | HIV disease resulting in unspecified malignant neoplasm |
| 71450 | A788X00 | HIV disease resulting/unspcf infectious+parasitic disease |
| 62891 | A788y00 | Human immunodeficiency virus with other clinical findings |
| 44303 | A789.00 | Human immunodef virus resulting in other disease |
| 37006 | A789000 | HIV disease resulting in mycobacterial infection |
| 66368 | A789100 | HIV disease resulting in cytomegaloviral disease |
| 23951 | A789200 | HIV disease resulting in candidiasis |

| | | |
|--------|---------|--|
| 27641 | A789300 | HIV disease resulting in Pneumocystis carinii pneumonia |
| 104717 | A789311 | HIV disease resulting in Pneumocystis jirovecii pneumonia |
| 104717 | A789311 | HIV disease resulting in Pneumocystis jirovecii pneumonia |
| 50076 | A789400 | HIV disease resulting in multiple infections |
| 27853 | A789500 | HIV disease resulting in Kaposi's sarcoma |
| 108054 | A789511 | HIV disease resulting in Kaposi sarcoma |
| 108054 | A789511 | HIV disease resulting in Kaposi sarcoma |
| 44617 | A789600 | HIV disease resulting in Burkitt's lymphoma |
| 111980 | A789611 | HIV disease resulting in Burkitt lymphoma |
| 111980 | A789611 | HIV disease resulting in Burkitt lymphoma |
| 66367 | A789700 | HIV dis resulting oth types of non-Hodgkin's lymphoma |
| 111981 | A789711 | HIV disease resulting in other types of non-Hodgkin lymphoma |
| 111981 | A789711 | HIV disease resulting in other types of non-Hodgkin lymphoma |
| 105324 | A789800 | HIV disease resulting in multiple malignant neoplasms |
| 105324 | A789800 | HIV disease resulting in multiple malignant neoplasms |
| 65117 | A789900 | HIV disease resulting in lymphoid interstitial pneumonitis |
| 8281 | A789A00 | HIV disease resulting in wasting syndrome |
| 51708 | A789X00 | HIV dis reslt/oth mal neopl/lymph |
| 112030 | AyuC000 | [X]HIV disease resulting in other bacterial infections |
| 112030 | AyuC000 | [X]HIV disease resulting in other bacterial infections |
| 107807 | AyuC100 | [X]HIV disease resulting in other viral infections |
| 107807 | AyuC100 | [X]HIV disease resulting in other viral infections |
| 112031 | AyuC200 | [X]HIV disease resulting in other mycoses |
| 112031 | AyuC200 | [X]HIV disease resulting in other mycoses |
| 102117 | AyuC300 | [X]HIV disease resulting in multiple infections |
| 102117 | AyuC300 | [X]HIV disease resulting in multiple infections |
| 104134 | AyuC400 | [X]HIV disease resulting/other infectious+parasitic diseases |
| 104134 | AyuC400 | [X]HIV disease resulting/other infectious+parasitic diseases |
| 112032 | AyuC500 | [X]HIV disease resulting/unspcf infectious+parasitic disease |
| 112032 | AyuC500 | [X]HIV disease resulting/unspcf infectious+parasitic disease |
| 69767 | AyuC600 | [X]HIV disease resulting in other non-Hodgkin's lymphoma |
| 112033 | AyuC611 | [X]HIV disease resulting in other non-Hodgkin lymphoma |
| 112033 | AyuC611 | [X]HIV disease resulting in other non-Hodgkin lymphoma |

| | | |
|--------|---------|---|
| 112034 | AyuC700 | [X]HIV dis reslt/oth mal neopl/lymph |
| 112034 | AyuC700 | [X]HIV dis reslt/oth mal neopl/lymph |
| 112035 | AyuC800 | [X]HIV disease resulting in other malignant neoplasms |
| 112035 | AyuC800 | [X]HIV disease resulting in other malignant neoplasms |
| 112036 | AyuC900 | [X]HIV disease resulting in unspecified malignant neoplasm |
| 112036 | AyuC900 | [X]HIV disease resulting in unspecified malignant neoplasm |
| 112037 | AyuCA00 | [X]HIV disease resulting in multiple diseases CE |
| 112037 | AyuCA00 | [X]HIV disease resulting in multiple diseases CE |
| 96751 | AyuCB00 | [X]HIV disease result/haematological+immunologic abnorms |
| 102252 | AyuCC00 | [X]HIV disease resulting in other specified conditions |
| 102252 | AyuCC00 | [X]HIV disease resulting in other specified conditions |
| 100769 | AyuCD00 | [X]Unspecified human immunodeficiency virus [HIV] disease |
| 100769 | AyuCD00 | [X]Unspecified human immunodeficiency virus [HIV] disease |
| 41185 | Eu02400 | [X]Dementia in human immunodef virus [HIV] disease |
| 104466 | L179.00 | HIV disease complicating pregnancy childbirth puerperium |
| 44288 | R109.00 | [D]Laboratory evidence of human immunodeficiency virus [HIV] |
| 24872 | ZV01A00 | [V]Asymptomatic human immunodeficiency virus infection status |

Table A2. ICD-10 codes to identify patients with HIV from hospitalisations (HES).

| ICD-10 code | ICD-10 term |
|-------------|---|
| B200 | HIV disease resulting in mycobacterial infection |
| B201 | HIV disease resulting in other bacterial infections |
| B202 | HIV disease resulting in cytomegaloviral disease |
| B203 | HIV disease resulting in other viral infections |
| B204 | HIV disease resulting in candidiasis |
| B205 | HIV disease resulting in other mycoses |
| B207 | HIV disease resulting in multiple infections |
| B208 | HIV disease resulting in other infectious and parasitic diseases |
| B209 | HIV disease resulting in unspecified infectious or parasitic disease |
| B212 | HIV disease resulting in other types of non-Hodgkin lymphoma |
| B213 | HIV disease resulting in other malignant neoplasms of lymphoid, haematopoietic and related tissue |
| B217 | HIV disease resulting in multiple malignant neoplasms |
| B218 | HIV disease resulting in other malignant neoplasms |
| B219 | HIV disease resulting in unspecified malignant neoplasm |
| B221 | HIV disease resulting in lymphoid interstitial pneumonitis |
| B227 | HIV disease resulting in multiple diseases classified elsewhere |
| B23 | Human immunodeficiency virus [HIV] disease resulting in other conditions |
| B24 | Unspecified human immunodeficiency virus [HIV] disease |
| F024 | Dementia in human immunodeficiency virus [HIV] disease |
| R75 | Laboratory evidence of human immunodeficiency virus [HIV] |
| Z21 | Asymptomatic human immunodeficiency virus [HIV] infection status |
| B206 | HIV disease resulting in Pneumocystis jirovecii pneumonia |
| B210 | HIV disease resulting in Kaposi sarcoma |
| B211 | HIV disease resulting in Burkitt lymphoma |
| B220 | HIV disease resulting in encephalopathy |
| B222 | HIV disease resulting in wasting syndrome |

Table A3. Proportion of patients with a previous lipid and estimated glomerular filtration rate blood test.

| | People with HIV | People without HIV |
|-------------------|------------------------|---------------------------|
| Total cholesterol | 391 (40.6%) | 374563 (39.8%) |
| LDL-C | 441 (45.7%) | 404679 (43%) |
| HDL-C | 489 (50.7%) | 451734 (48%) |
| Triglycerides | 476 (49.4%) | 444205 (47.2%) |
| eGFR* | 327 (33.9%) | 307396 (32.7%) |

Chronic kidney disease defined using codes and eGFR. Lipids defined biochemically only.
 LDL-C=Low density lipoprotein cholesterol. HDL-C=High density lipoprotein cholesterol.
 eGFR=estimated glomerular filtration rate.

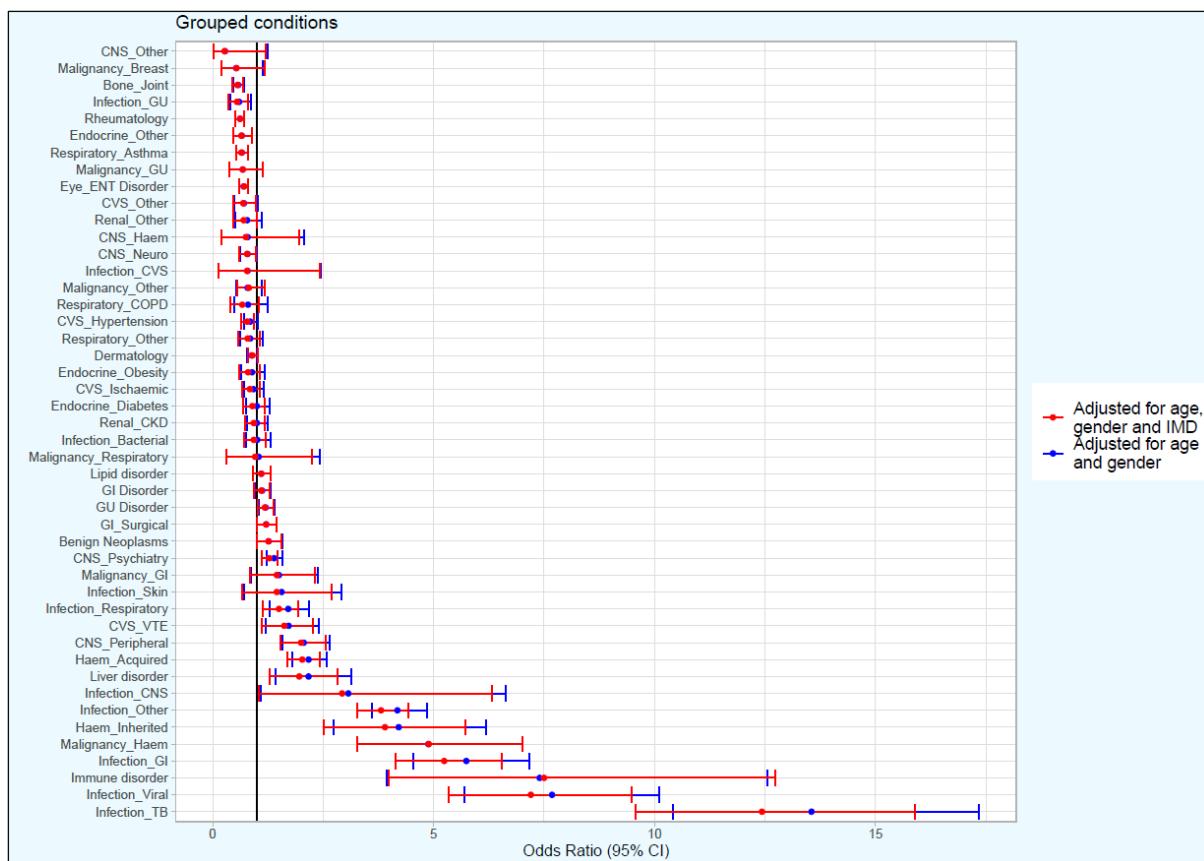


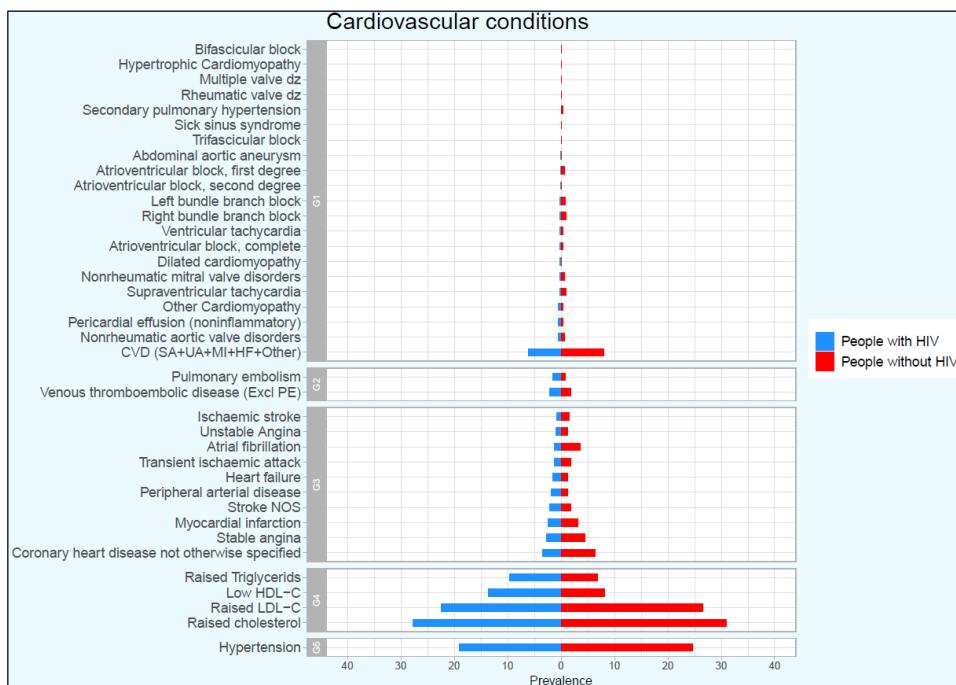
Figure A1. Odds ratios for 47 health condition groups in adults with HIV compared to those without HIV before (blue) and after (red) adjustment for deprivation.

HIV=human immunodeficiency virus. TB=tuberculosis. GI=gastrointestinal. Haem=haematological. CNS=central nervous system. VTE=venous thromboembolism. GU=genitourinary/gynaecological. CKD=chronic kidney disease. CVS=cardiovascular. ENT=ear, nose and throat. COPD=chronic obstructive pulmonary disease. OR=odds ratio. 95%CI=95% confidence interval. IMD=index of multiple deprivation.

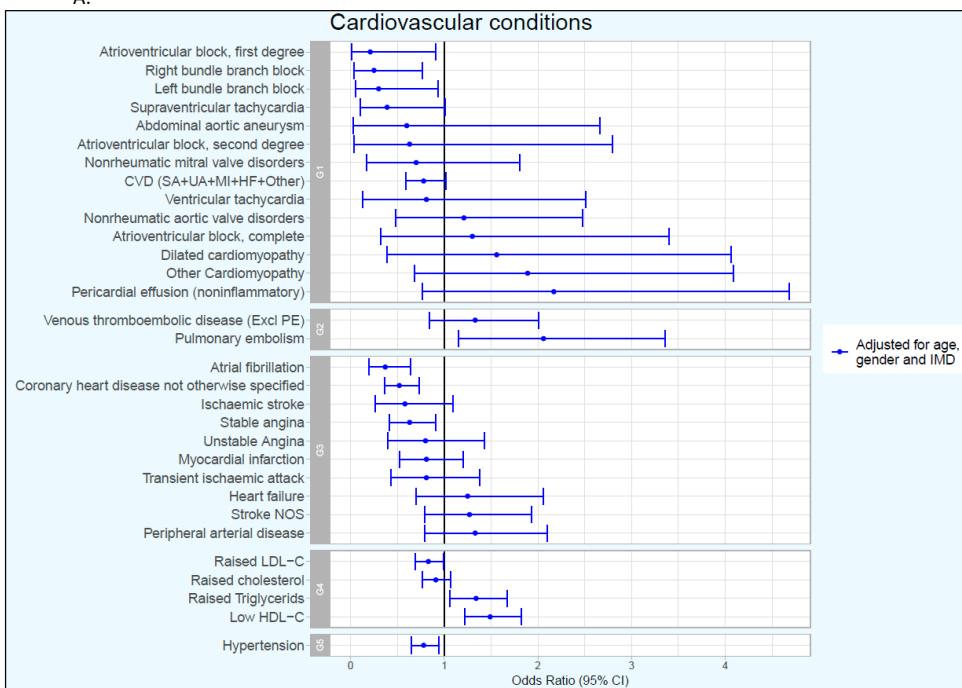
Table A4. Prevalence and odds ratios of individual cardiovascular conditions in adults with HIV compared to those without HIV.

| Health condition | People with HIV, n (%) (N=964) | People without HIV,n (%) (N=941113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|--|--------------------------------|-------------------------------------|------------------------|--------------------------------------|---|
| CVS Ischaemic | | | | | |
| Atrial fibrillation | 12 (1.2) | 34326 (3.6) | 0.33 (0.18-0.56) | 0.39 (0.21-0.66) | 0.37 (0.20-0.64) |
| Coronary heart disease not otherwise specified | 33 (3.4) | 60336 (6.4) | 0.52 (0.36-0.72) | 0.57 (0.39-0.80) | 0.52 (0.36-0.73) |
| Heart failure | 14 (1.5) | 11921 (1.3) | 1.15 (0.64-1.87) | 1.39 (0.78-2.29) | 1.25 (0.70-2.06) |
| Ischaemic stroke | 8 (0.8) | 14810 (1.6) | 0.52 (0.24-0.98) | 0.63 (0.28-1.18) | 0.58 (0.26-1.09) |
| Myocardial infarction | 24 (2.5) | 28733 (3.1) | 0.81 (0.53-1.19) | 0.90 (0.58-1.34) | 0.81 (0.52-1.20) |
| Peripheral arterial disease | 17 (1.8) | 12552 (1.3) | 1.33 (0.79-2.07) | 1.53 (0.90-2.40) | 1.33 (0.79-2.10) |
| Stable angina | 27 (2.8) | 42367 (4.5) | 0.61 (0.41-0.88) | 0.70 (0.46-1.01) | 0.63 (0.41-0.91) |
| Stroke NOS | 21 (2.2) | 18221 (1.9) | 1.13 (0.71-1.69) | 1.39 (0.87-2.11) | 1.27 (0.79-1.93) |
| Transient ischaemic attack | 12 (1.2) | 16636 (1.8) | 0.70 (0.37-1.18) | 0.87 (0.46-1.47) | 0.81 (0.43-1.38) |
| Unstable Angina | 10 (1) | 12363 (1.3) | 0.79 (0.39-1.39) | 0.90 (0.45-1.59) | 0.80 (0.40-1.43) |
| CVS VTE | | | | | |
| Pulmonary embolism | 14 (1.5) | 7717 (0.8) | 1.78 (1.00-2.90) | 2.16 (1.21-3.53) | 2.06 (1.15-3.36) |
| Venous thromboembolic disease (Excl PE) | 21 (2.2) | 17037 (1.8) | 1.21 (0.76-1.81) | 1.43 (0.89-2.15) | 1.33 (0.84-2.01) |
| CVS Hypertension | | | | | |
| Hypertension | 184 (19.1) | 231652 (24.6) | 0.72 (0.61-0.85) | 0.85 (0.70-1.02) | 0.78 (0.65-0.94) |
| Lipid Disorder | | | | | |
| Low HDL-C | 131 (13.6) | 77260 (8.2) | 1.89 (1.55-2.29) | 1.60 (1.30-1.95) | 1.49 (1.22-1.82) |
| Raised cholesterol | 268 (27.8) | 290470 (30.9) | 0.84 (0.71-0.98) | 0.87 (0.74-1.03) | 0.91 (0.77-1.07) |
| Raised LDL-C | 217 (22.5) | 249594 (26.5) | 0.81 (0.68-0.97) | 0.81 (0.67-0.96) | 0.83 (0.69-0.99) |
| Raised Triglycerides | 93 (9.6) | 65328 (6.9) | 1.56 (1.24-1.94) | 1.43 (1.13-1.78) | 1.34 (1.06-1.67) |
| CVS Other | | | | | |
| Abdominal aortic aneurysm | <5 | 1678 (0.2) | 0.58 (0.03-2.56) | 0.64 (0.04-2.85) | 0.60 (0.03-2.66) |
| Atrioventricular block, complete | <5 | 2578 (0.3) | 1.14 (0.28-2.96) | 1.36 (0.34-3.56) | 1.30 (0.32-3.40) |
| Atrioventricular block, first degree | <5 | 5308 (0.6) | 0.18 (0.01-0.81) | 0.22 (0.01-0.96) | 0.21 (0.01-0.91) |
| Atrioventricular block, second degree | <5 | 1738 (0.2) | 0.56 (0.03-2.48) | 0.66 (0.04-2.90) | 0.63 (0.04-2.80) |
| CVD (SA+UA+MI+HF+Other) | 51 (6.1) | 75523 (8) | 0.75 (0.57-0.96) | 0.85 (0.64-1.12) | 0.78 (0.59-1.02) |
| Dilated cardiomyopathy | <5 | 1867 (0.2) | 1.57 (0.39-4.09) | 1.62 (0.40-4.23) | 1.56 (0.39-4.06) |
| Left bundle branch block | <5 | 7388 (0.8) | 0.26 (0.04-0.81) | 0.32 (0.05-1.00) | 0.30 (0.05-0.93) |
| Nonrheumatic aortic valve disorders | 6 (0.6) | 5882 (0.6) | 1.00 (0.39-2.03) | 1.22 (0.48-2.49) | 1.21 (0.48-2.48) |
| Nonrheumatic mitral valve disorders | <5 | 5452 (0.6) | 0.54 (0.13-1.39) | 0.66 (0.16-1.71) | 0.70 (0.17-1.81) |
| Other Cardiomyopathy | <5 | 2652 (0.3) | 1.84 (0.66-3.98) | 1.98 (0.71-4.27) | 1.89 (0.68-4.09) |
| Pericardial effusion (noninflammatory) | <5 | 2481 (0.3) | 1.97 (0.71-4.26) | 2.28 (0.81-4.94) | 2.17 (0.77-4.68) |
| Right bundle branch block | <5 | 8314 (0.9) | 0.23 (0.04-0.72) | 0.26 (0.04-0.81) | 0.25 (0.04-0.77) |
| Supraventricular tachycardia | <5 | 8656 (0.9) | 0.34 (0.08-0.87) | 0.39 (0.10-1.01) | 0.39 (0.10-1.01) |
| Ventricular tachycardia | <5 | 2497 (0.3) | 0.78 (0.13-2.42) | 0.85 (0.14-2.63) | 0.81 (0.13-2.51) |

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation. CVD = Cardiovascular disease (composite of stable angina, unstable angina, myocardial infarction, heart failure or coronary heart disease not otherwise specified). VTE=venous thromboembolic. PE = pulmonary embolism. HDL = high density lipoprotein. LDL = low density lipoprotein.



A.



B.

Figure A2. Prevalence (A) and odds ratios (B) of individual cardiovascular conditions in adults with HIV compared to those without HIV.

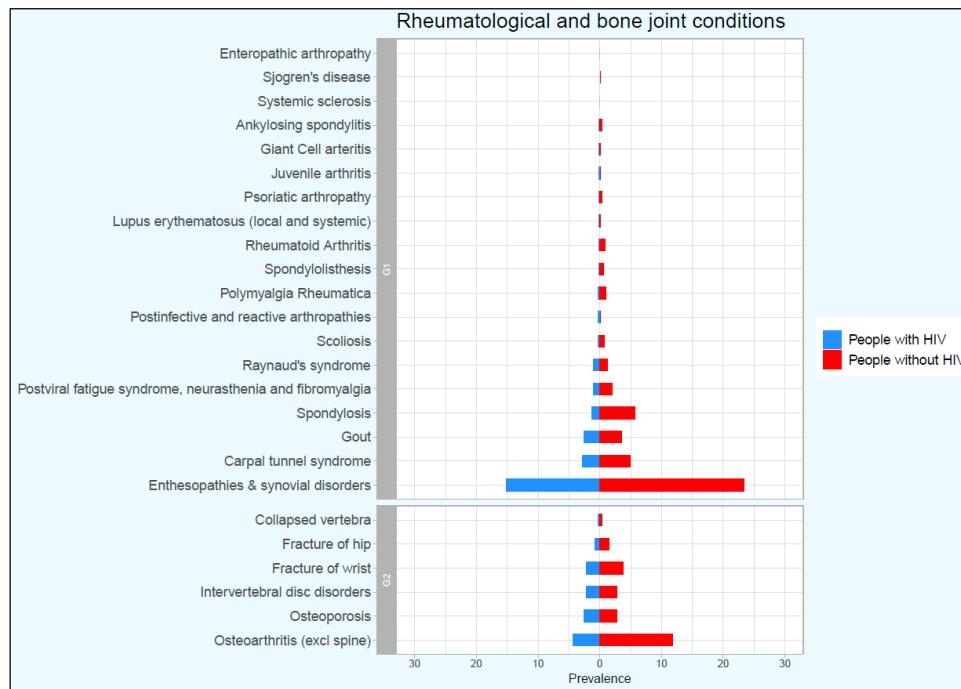
CVD= cardiovascular disease. SA = stable angina. UA = unstable angina. MI = myocardial infarction. HF = heart failure. Other = Coronary heart disease not otherwise specified. PE = pulmonary embolism. LDL = low density lipoprotein. HDL = high density lipoprotein. IMD = index of multiple deprivation.

G1 = CVS_Other. G2 = CVS_VTE, G3 = CVS_Ischaemic, G4 = Lipid disorder, G5 = CVS_Hypertension.

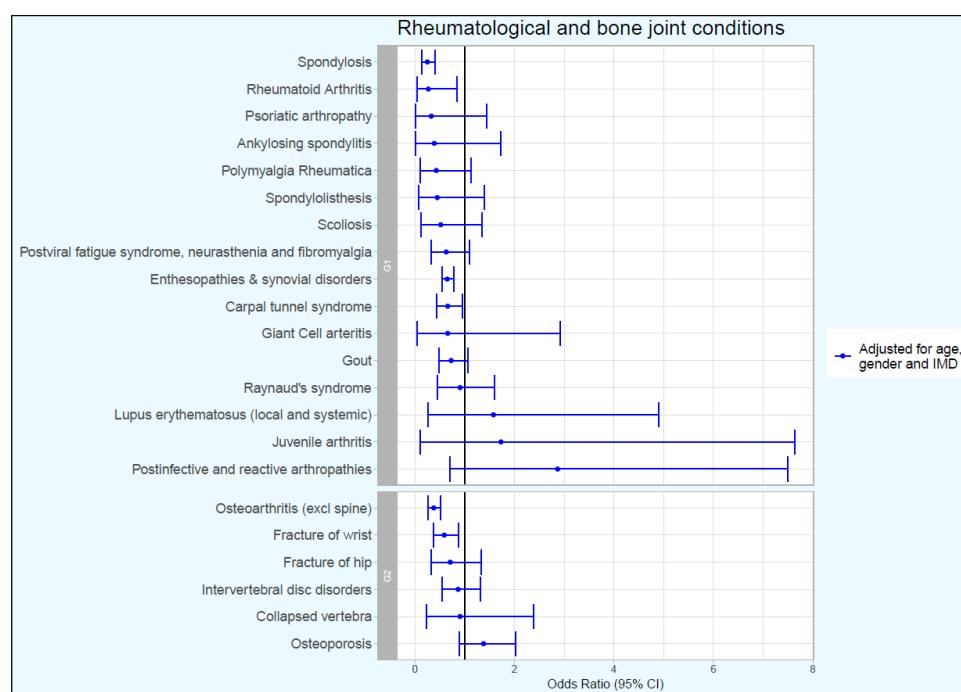
Table A5. Prevalence and odds ratios of individual rheumatological and other bone and joint conditions in adults with HIV compared to those without HIV.

| Health condition | People with HIV, n (%) (N=964) | People without HIV, n (%) (N=941113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|---|--------------------------------|--------------------------------------|------------------------|--------------------------------------|---|
| Rheumatological | | | | | |
| Ankylosing spondylitis | <5 | 2464 (0.3) | 0.40 (0.02-1.74) | 0.39 (0.02-1.74) | 0.39 (0.02-1.72) |
| Carpal tunnel syndrome | 27 (2.8) | 45979 (4.9) | 0.56 (0.37-0.80) | 0.68 (0.45-0.99) | 0.66 (0.44-0.96) |
| Enthesopathies & synovial disorders | 146 (15.1) | 219958 (23.4) | 0.59 (0.49-0.70) | 0.64 (0.53-0.76) | 0.65 (0.54-0.78) |
| Giant Cell arteritis | <5 | 1969 (0.2) | 0.50 (0.03-2.18) | 0.69 (0.04-3.04) | 0.66 (0.04-2.92) |
| Gout | 25 (2.6) | 32864 (3.5) | 0.74 (0.48-1.07) | 0.73 (0.48-1.07) | 0.73 (0.48-1.07) |
| Juvenile arthritis | <5 | 545 (0.1) | 1.79 (0.10-7.92) | 1.71 (0.10-7.55) | 1.73 (0.10-7.64) |
| Lupus erythematosus (local and systemic) | <5 | 1517 (0.2) | 1.29 (0.21-3.99) | 1.64 (0.27-5.10) | 1.58 (0.26-4.90) |
| Polymyalgia Rheumatica | <5 | 9371 (1) | 0.31 (0.08-0.81) | 0.43 (0.11-1.12) | 0.43 (0.11-1.13) |
| Postinfective and reactive arthropathies | <5 | 1138 (0.1) | 2.58 (0.64-6.71) | 2.60 (0.64-6.77) | 2.87 (0.71-7.49) |
| Postviral fatigue syndrome, neurasthenia and fibromyalgia | 11 (1.1) | 18671 (2) | 0.57 (0.30-0.98) | 0.68 (0.35-1.17) | 0.63 (0.33-1.09) |
| Psoriatic arthropathy | <5 | 3196 (0.3) | 0.30 (0.02-1.34) | 0.33 (0.02-1.44) | 0.33 (0.02-1.45) |
| Raynaud's syndrome | 10 (1) | 12565 (1.3) | 0.77 (0.39-1.36) | 0.90 (0.45-1.59) | 0.91 (0.45-1.60) |
| Rheumatoid Arthritis | <5 | 8569 (0.9) | 0.23 (0.04-0.70) | 0.28 (0.05-0.88) | 0.27 (0.05-0.84) |
| Scoliosis | <5 | 6390 (0.7) | 0.46 (0.11-1.19) | 0.50 (0.12-1.30) | 0.52 (0.13-1.35) |
| Spondylolisthesis | <5 | 5256 (0.6) | 0.37 (0.06-1.15) | 0.45 (0.07-1.40) | 0.45 (0.07-1.40) |
| Spondylosis | 13 (1.3) | 54088 (5.7) | 0.22 (0.12-0.37) | 0.27 (0.15-0.45) | 0.25 (0.14-0.41) |
| Bone and Joint | | | | | |
| Collapsed vertebra | <5 | 3878 (0.4) | 0.75 (0.19-1.96) | 0.98 (0.24-2.55) | 0.91 (0.23-2.38) |
| Fracture of hip | 8 (0.8) | 14045 (1.5) | 0.55 (0.25-1.03) | 0.76 (0.35-1.44) | 0.71 (0.32-1.34) |
| Fracture of wrist | 21 (2.2) | 35563 (3.8) | 0.57 (0.36-0.85) | 0.59 (0.37-0.89) | 0.59 (0.37-0.88) |
| Intervertebral disc disorders | 21 (2.2) | 26089 (2.8) | 0.78 (0.49-1.17) | 0.85 (0.53-1.27) | 0.87 (0.55-1.31) |
| Osteoarthritis (excl spine) | 42 (4.4) | 110892 (11.8) | 0.34 (0.25-0.46) | 0.40 (0.29-0.55) | 0.38 (0.27-0.52) |
| Osteoporosis | 25 (2.6) | 26754 (2.8) | 0.91 (0.60-1.32) | 1.41 (0.91-2.08) | 1.38 (0.89-2.03) |

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.



A.



B.

Figure A3. Prevalence (A) and odds ratios (B) of individual rheumatological and other bone and joint conditions in adults with HIV compared to those without HIV.

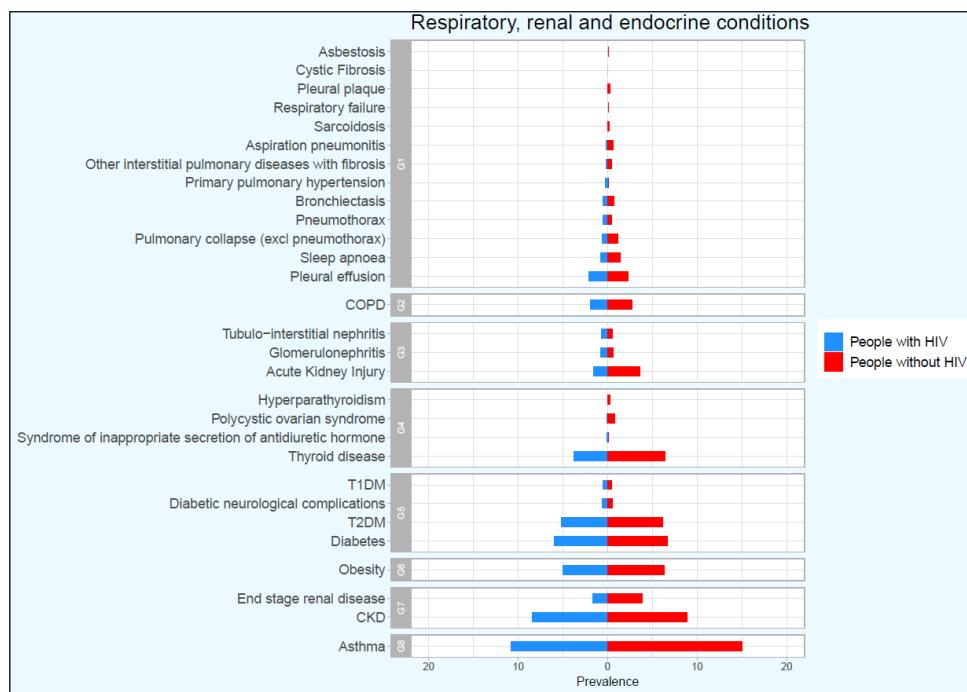
HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.

G1 = Rheumatology, G2 = Bone_Joint.

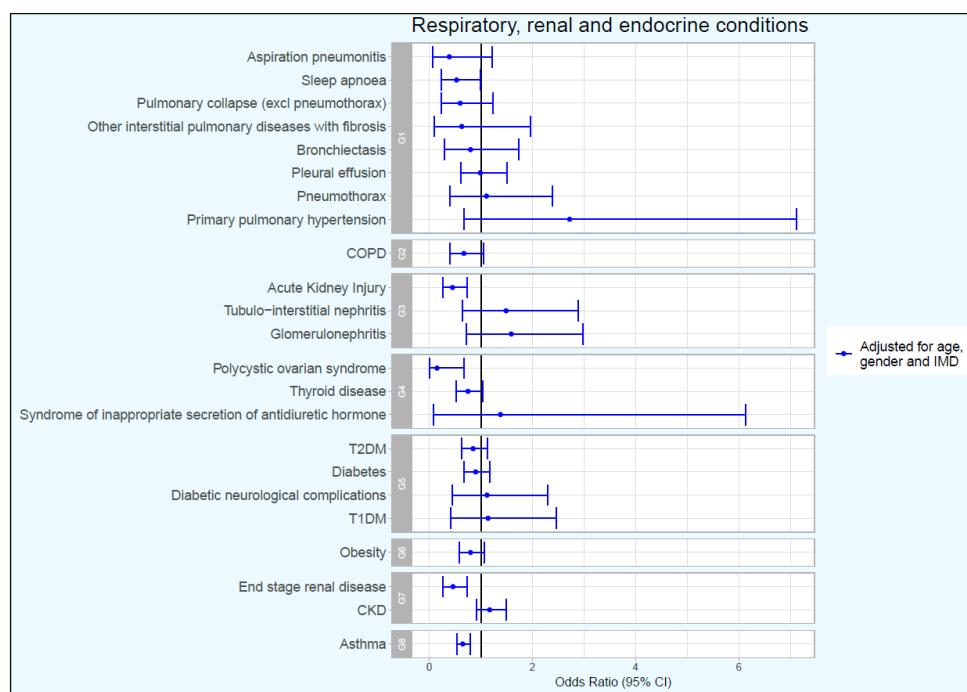
Table A6. Prevalence and odds ratios of individual respiratory, renal and endocrine conditions in adults with HIV compared to those without HIV.

| Health condition | People with HIV, n (%) (N=964) | People without HIV, n (%) (N=941113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|---|--------------------------------|--------------------------------------|------------------------|--------------------------------------|---|
| Respiratory Asthma | | | | | |
| Asthma | 104 (10.8) | 141624 (15) | 0.68 (0.55-0.83) | 0.66 (0.54-0.81) | 0.65 (0.53-0.80) |
| Respiratory COPD | | | | | |
| COPD | 18 (1.9) | 25698 (2.7) | 0.68 (0.41-1.05) | 0.80 (0.48-1.25) | 0.67 (0.40-1.05) |
| Respiratory Other | | | | | |
| Aspiration pneumonitis | <5 | 5298 (0.6) | 0.37 (0.06-1.14) | 0.43 (0.07-1.34) | 0.39 (0.07-1.22) |
| Bronchiectasis | <5 | 6984 (0.7) | 0.70 (0.25-1.50) | 0.85 (0.30-1.84) | 0.80 (0.29-1.74) |
| Other interstitial pulmonary diseases with fibrosis | <5 | 3346 (0.4) | 0.58 (0.10-1.80) | 0.69 (0.12-2.16) | 0.63 (0.10-1.96) |
| Pleural effusion | 20 (2.1) | 21605 (2.3) | 0.90 (0.56-1.36) | 1.08 (0.66-1.64) | 0.99 (0.61-1.50) |
| Pneumothorax | <5 | 4006 (0.4) | 1.22 (0.44-2.63) | 1.13 (0.40-2.44) | 1.11 (0.40-2.39) |
| Primary pulmonary hypertension | <5 | 1298 (0.1) | 2.26 (0.56-5.88) | 2.84 (0.70-7.41) | 2.72 (0.67-7.12) |
| Pulmonary collapse (excl pneumothorax) | 6 (0.6) | 9986 (1.1) | 0.58 (0.23-1.19) | 0.67 (0.27-1.37) | 0.60 (0.24-1.23) |
| Sleep apnoea | 8 (0.8) | 13482 (1.4) | 0.58 (0.26-1.08) | 0.55 (0.25-1.03) | 0.53 (0.24-0.99) |
| Renal CKD | | | | | |
| CKD | 81 (8.4) | 83907 (8.9) | 0.94 (0.74-1.17) | 1.27 (0.98-1.62) | 1.17 (0.91-1.49) |
| End stage renal disease | 16 (1.7) | 36953 (3.9) | 0.41 (0.24-0.65) | 0.48 (0.28-0.76) | 0.46 (0.27-0.73) |
| Renal Other | | | | | |
| Acute Kidney Injury | 15 (1.6) | 33515 (3.6) | 0.43 (0.25-0.69) | 0.51 (0.29-0.82) | 0.45 (0.26-0.73) |
| Glomerulonephritis | 8 (0.8) | 5240 (0.6) | 1.49 (0.68-2.79) | 1.65 (0.75-3.10) | 1.59 (0.72-2.98) |
| Tubulo-interstitial nephritis | 7 (0.7) | 4847 (0.5) | 1.41 (0.61-2.74) | 1.63 (0.70-3.16) | 1.49 (0.64-2.89) |
| Endocrine Diabetes | | | | | |
| Diabetic neurological complications | 6 (0.6) | 5000 (0.5) | 1.17 (0.46-2.38) | 1.33 (0.52-2.71) | 1.12 (0.44-2.29) |
| T1DM | <5 | 3930 (0.4) | 1.24 (0.44-2.68) | 1.16 (0.42-2.50) | 1.14 (0.41-2.46) |
| T2DM | 50 (5.2) | 57872 (6.1) | 0.83 (0.62-1.10) | 0.95 (0.70-1.25) | 0.85 (0.63-1.13) |
| Endocrine Obesity | | | | | |
| Obesity | 48 (5) | 59076 (6.3) | 0.78 (0.58-1.03) | 0.89 (0.65-1.17) | 0.80 (0.59-1.06) |
| Endocrine Other | | | | | |
| Polycystic ovarian syndrome | <5 | 7119 (0.8) | 0.14 (0.01-0.60) | 0.16 (0.01-0.69) | 0.15 (0.01-0.68) |
| Syndrome of inappropriate secretion of antidiuretic hormone | <5 | 865 (0.1) | 1.13 (0.06-4.98) | 1.47 (0.08-6.50) | 1.38 (0.08-6.14) |
| Thyroid disease | 37 (3.8) | 60429 (6.4) | 0.58 (0.41-0.80) | 0.76 (0.54-1.05) | 0.75 (0.52-1.03) |

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation. COPD=chronic obstructive pulmonary disease. CKD=chronic kidney disease.



A.



B.

Figure A4. Prevalence (A) and odds ratios (B) of individual respiratory, renal and endocrine conditions in adults with HIV compared to those without HIV.

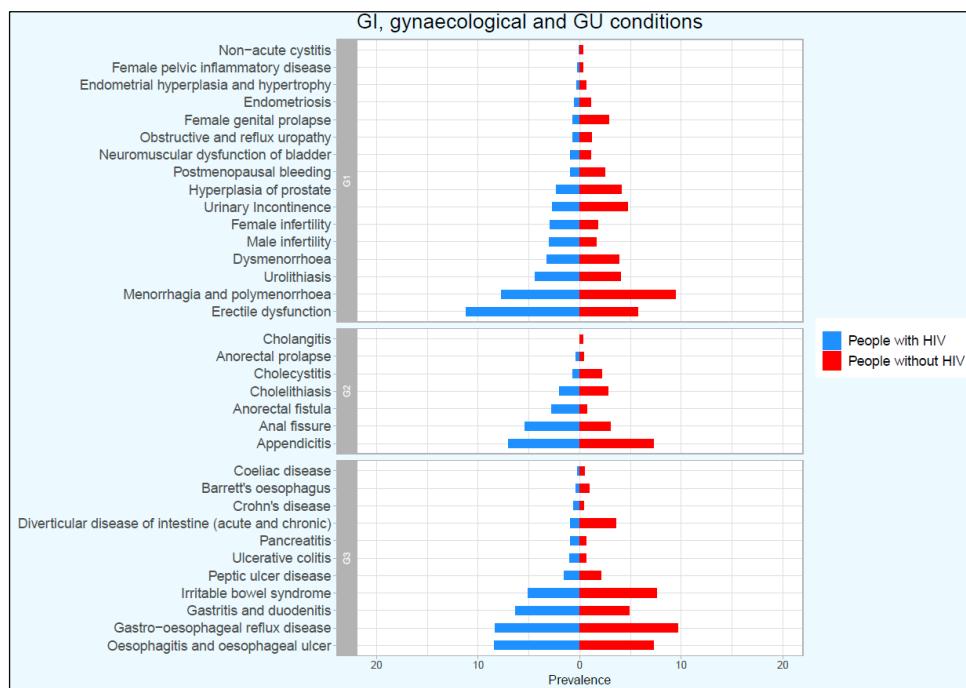
HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation. COPD=chronic obstructive pulmonary disease. CKD=chronic kidney disease.

G1 = Respiratory_Other, G2 = Respiratory_COPD, G3 = Renal_Other, G4 = Endocrine_Other, G5 = Endocrine_Diabetes, G6 = Endocrine_Obesity, G7 = Renal_CKD, G8 = Respiratory_Asthma.

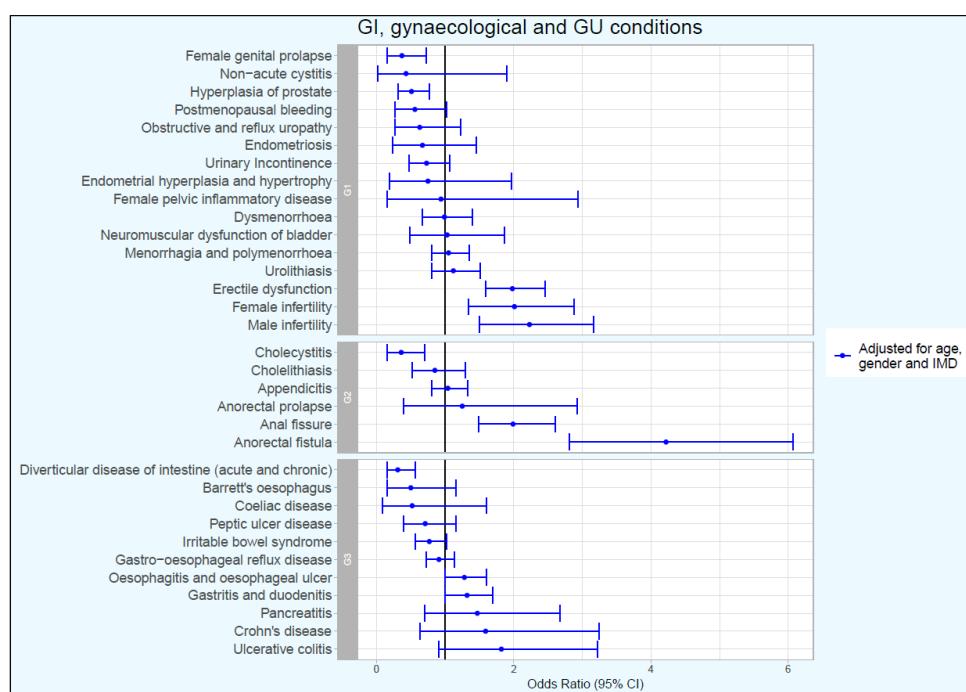
Table A7. Prevalence and odds ratios of individual GI, gynaecological and GU conditions in adults with HIV compared to those without HIV.

| Health condition | People with HIV, n (%) (N=964) | People without HIV, n (%) (N=941113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|---|--------------------------------|--------------------------------------|------------------------|--------------------------------------|---|
| GI Disorder | | | | | |
| Barrett's oesophagus | <5 | 8206 (0.9) | 0.47 (0.15-1.10) | 0.52 (0.16-1.21) | 0.50 (0.15-1.16) |
| Coeliac disease | <5 | 4351 (0.5) | 0.45 (0.07-1.38) | 0.50 (0.08-1.56) | 0.52 (0.09-1.60) |
| Crohn's disease | 6 (0.6) | 3836 (0.4) | 1.53 (0.61-3.11) | 1.58 (0.63-3.22) | 1.59 (0.63-3.24) |
| Diverticular disease of intestine (acute and chronic) | 9 (0.9) | 33472 (3.6) | 0.26 (0.12-0.46) | 0.32 (0.15-0.58) | 0.31 (0.15-0.57) |
| Gastritis and duodenitis | 61 (6.3) | 46323 (4.9) | 1.30 (1.00-1.68) | 1.42 (1.08-1.82) | 1.32 (1.00-1.69) |
| Gastro-oesophageal reflux disease | 80 (8.3) | 91664 (9.7) | 0.84 (0.66-1.05) | 0.94 (0.74-1.17) | 0.91 (0.72-1.14) |
| Irritable bowel syndrome | 49 (5.1) | 71248 (7.6) | 0.65 (0.48-0.86) | 0.75 (0.56-1.00) | 0.77 (0.57-1.02) |
| Oesophagitis and oesophageal ulcer | 81 (8.4) | 68633 (7.3) | 1.17 (0.92-1.45) | 1.31 (1.03-1.64) | 1.28 (1.00-1.60) |
| Pancreatitis | 9 (0.9) | 6052 (0.6) | 1.46 (0.70-2.64) | 1.62 (0.78-2.94) | 1.47 (0.70-2.67) |
| Peptic ulcer disease | 14 (1.5) | 19502 (2.1) | 0.70 (0.39-1.13) | 0.77 (0.43-1.26) | 0.71 (0.40-1.16) |
| Ulcerative colitis | 10 (1) | 6007 (0.6) | 1.63 (0.82-2.87) | 1.75 (0.87-3.08) | 1.82 (0.91-3.22) |
| GI Surgical | | | | | |
| Anal fissure | 52 (5.4) | 27913 (3) | 1.87 (1.39-2.44) | 1.92 (1.44-2.51) | 1.99 (1.49-2.61) |
| Anorectal fistula | 27 (2.8) | 6264 (0.7) | 4.30 (2.86-6.18) | 4.24 (2.82-6.09) | 4.22 (2.81-6.07) |
| Anorectal prolapse | <5 | 3961 (0.4) | 0.99 (0.31-2.30) | 1.24 (0.38-2.91) | 1.25 (0.39-2.93) |
| Appendicitis | 67 (7) | 68382 (7.3) | 0.95 (0.74-1.21) | 1.03 (0.79-1.31) | 1.04 (0.80-1.33) |
| Cholecystitis | 7 (0.7) | 21113 (2.2) | 0.32 (0.14-0.62) | 0.39 (0.17-0.75) | 0.36 (0.15-0.70) |
| Cholelithiasis | 19 (2) | 26434 (2.8) | 0.70 (0.43-1.06) | 0.88 (0.54-1.35) | 0.85 (0.52-1.30) |
| Gynaecological-GU Disorder | | | | | |
| Dysmenorrhoea | 31 (3.2) | 36363 (3.9) | 0.83 (0.57-1.16) | 1.02 (0.69-1.45) | 0.99 (0.67-1.40) |
| Endometrial hyperplasia and hypertrophy | <5 | 5243 (0.6) | 0.56 (0.14-1.45) | 0.78 (0.19-2.05) | 0.75 (0.19-1.97) |
| Endometriosis | <5 | 10047 (1.1) | 0.48 (0.17-1.04) | 0.63 (0.23-1.37) | 0.67 (0.24-1.46) |
| Erectile dysfunction | 108 (11.2) | 53186 (5.7) | 2.11 (1.71-2.56) | 2.05 (1.64-2.54) | 1.98 (1.59-2.46) |
| Female genital prolapse | 7 (0.7) | 27628 (2.9) | 0.24 (0.10-0.47) | 0.36 (0.15-0.71) | 0.37 (0.16-0.73) |
| Female infertility | 28 (2.9) | 16998 (1.8) | 1.63 (1.09-2.32) | 1.94 (1.30-2.78) | 2.01 (1.34-2.88) |
| Female pelvic inflammatory disease | <5 | 2710 (0.3) | 0.72 (0.12-2.23) | 0.97 (0.16-3.00) | 0.94 (0.16-2.94) |
| Hyperplasia of prostate | 22 (2.3) | 38807 (4.1) | 0.54 (0.35-0.81) | 0.51 (0.32-0.77) | 0.51 (0.32-0.77) |
| Male infertility | 29 (3) | 14615 (1.6) | 1.97 (1.33-2.79) | 2.14 (1.44-3.03) | 2.23 (1.50-3.16) |
| Menorrhagia and polymenorrhoea | 74 (7.7) | 88577 (9.4) | 0.80 (0.63-1.01) | 1.08 (0.84-1.39) | 1.05 (0.81-1.35) |
| Neuromuscular dysfunction of bladder | 9 (0.9) | 10301 (1.1) | 0.85 (0.41-1.54) | 1.04 (0.50-1.89) | 1.03 (0.49-1.87) |
| Non-acute cystitis | <5 | 2811 (0.3) | 0.35 (0.02-1.53) | 0.43 (0.02-1.91) | 0.43 (0.02-1.90) |
| Obstructive and reflux uropathy | 7 (0.7) | 10863 (1.2) | 0.63 (0.27-1.22) | 0.66 (0.28-1.28) | 0.63 (0.27-1.23) |
| Postmenopausal bleeding | 9 (0.9) | 23875 (2.5) | 0.36 (0.17-0.66) | 0.55 (0.26-1.01) | 0.56 (0.27-1.02) |
| Urinary Incontinence | 26 (2.7) | 44020 (4.7) | 0.56 (0.37-0.82) | 0.77 (0.50-1.12) | 0.73 (0.48-1.07) |
| Urolithiasis | 42 (4.4) | 37271 (4) | 1.10 (0.80-1.48) | 1.13 (0.82-1.53) | 1.12 (0.81-1.51) |

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.



A.



B.

Figure A5. Prevalence and odds ratios of individual GI, gynaecological and GU conditions in adults with HIV compared to those without HIV.

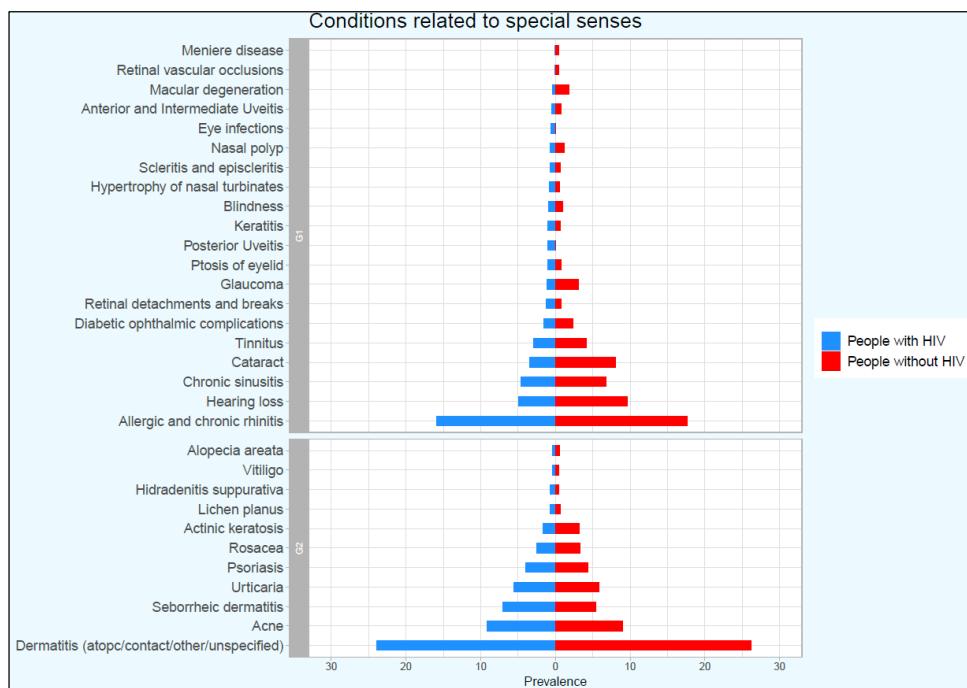
HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.

G1 = Gu Disorder, G2 = GI_Surgical, G3 = Gi Disorder.

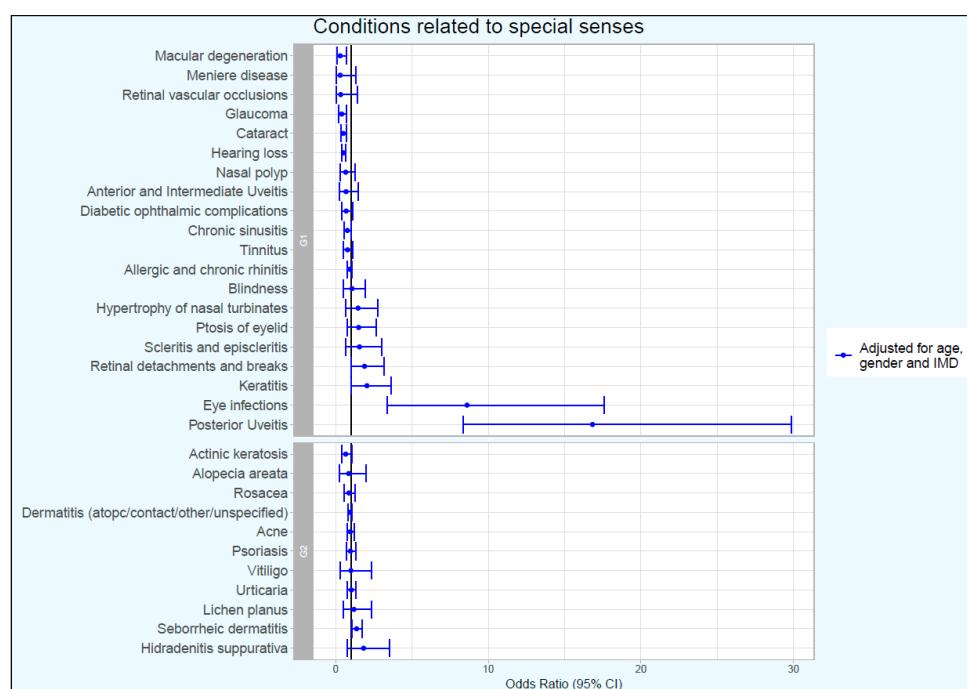
Table A8. Prevalence and odds ratios of individual conditions related to the special senses in adults with HIV compared to those without HIV.

| Health condition | People with HIV, n (%) (N=964) | People without HIV, n (%) (N=941113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|---|--------------------------------|--------------------------------------|------------------------|--------------------------------------|---|
| Ear, Nose and Throat | | | | | |
| Allergic and chronic rhinitis | 153 (15.9) | 165524 (17.6) | 0.88 (0.74-1.05) | 0.88 (0.74-1.04) | 0.91 (0.76-1.07) |
| Chronic sinusitis | 44 (4.6) | 64051 (6.8) | 0.65 (0.48-0.87) | 0.75 (0.54-1.00) | 0.77 (0.56-1.03) |
| Hearing loss | 47 (4.9) | 90395 (9.6) | 0.48 (0.35-0.64) | 0.52 (0.38-0.69) | 0.51 (0.38-0.68) |
| Hypertrophy of nasal turbinates | 8 (0.8) | 4805 (0.5) | 1.63 (0.74-3.05) | 1.50 (0.68-2.81) | 1.47 (0.67-2.75) |
| Keratitis | 10 (1) | 5477 (0.6) | 1.79 (0.89-3.15) | 1.96 (0.98-3.45) | 2.05 (1.02-3.62) |
| Meniere disease | <5 | 4070 (0.4) | 0.24 (0.01-1.05) | 0.30 (0.02-1.33) | 0.30 (0.02-1.30) |
| Nasal polyp | 7 (0.7) | 10910 (1.2) | 0.62 (0.27-1.21) | 0.64 (0.28-1.25) | 0.66 (0.28-1.29) |
| Eye | | | | | |
| Anterior and Intermediate Uveitis | <5 | 7870 (0.8) | 0.62 (0.22-1.33) | 0.67 (0.24-1.45) | 0.68 (0.24-1.47) |
| Blindness | 9 (0.9) | 9011 (1) | 0.97 (0.47-1.76) | 1.15 (0.55-2.09) | 1.07 (0.51-1.94) |
| Cataract | 34 (3.5) | 75210 (8) | 0.42 (0.29-0.58) | 0.52 (0.36-0.73) | 0.50 (0.34-0.70) |
| Diabetic ophthalmic complications | 15 (1.6) | 21664 (2.3) | 0.67 (0.38-1.08) | 0.75 (0.43-1.21) | 0.69 (0.40-1.12) |
| Eye infections | 6 (0.6) | 692 (0.1) | 8.51 (3.37-17.38) | 9.21 (3.64-18.82) | 8.61 (3.40-17.61) |
| Glaucoma | 11 (1.1) | 29204 (3.1) | 0.36 (0.19-0.62) | 0.40 (0.21-0.69) | 0.40 (0.20-0.69) |
| Keratitis | 10 (1) | 5477 (0.6) | 1.79 (0.89-3.15) | 1.96 (0.98-3.45) | 2.05 (1.02-3.62) |
| Macular degeneration | <5 | 16561 (1.8) | 0.23 (0.07-0.54) | 0.31 (0.10-0.73) | 0.30 (0.09-0.70) |
| Posterior Uveitis | 10 (1) | 635 (0.1) | 15.52 (7.73-27.50) | 16.97 (8.44-30.10) | 16.83 (8.36-29.88) |
| Ptosis of eyelid | 10 (1) | 7508 (0.8) | 1.30 (0.65-2.30) | 1.53 (0.76-2.71) | 1.51 (0.76-2.68) |
| Retinal detachments and breaks | 12 (1.2) | 7146 (0.8) | 1.65 (0.88-2.78) | 1.82 (0.97-3.08) | 1.89 (1.01-3.19) |
| Retinal vascular occlusions | <5 | 3670 (0.4) | 0.27 (0.02-1.17) | 0.33 (0.02-1.45) | 0.33 (0.02-1.44) |
| Scleritis and episcleritis | 7 (0.7) | 5329 (0.6) | 1.28 (0.55-2.49) | 1.46 (0.63-2.84) | 1.56 (0.67-3.03) |
| Skin | | | | | |
| Acne | 89 (9.2) | 84949 (9) | 1.03 (0.82-1.27) | 0.93 (0.74-1.15) | 0.96 (0.76-1.20) |
| Actinic keratosis | 16 (1.7) | 29879 (3.2) | 0.51 (0.30-0.81) | 0.60 (0.35-0.96) | 0.66 (0.39-1.06) |
| Alopecia areata | <5 | 4632 (0.5) | 0.84 (0.26-1.96) | 0.85 (0.26-1.99) | 0.85 (0.26-1.98) |
| Dermatitis (atopic/contact/other/unspecified) | 230 (23.9) | 246160 (26.2) | 0.88 (0.76-1.02) | 0.92 (0.79-1.07) | 0.93 (0.80-1.08) |
| Hidradenitis suppurativa | 7 (0.7) | 3800 (0.4) | 1.80 (0.77-3.50) | 1.96 (0.84-3.82) | 1.83 (0.78-3.55) |
| Lichen planus | 7 (0.7) | 6904 (0.7) | 0.99 (0.42-1.92) | 1.17 (0.50-2.27) | 1.20 (0.51-2.33) |
| Psoriasis | 39 (4) | 40604 (4.3) | 0.94 (0.67-1.27) | 0.98 (0.70-1.33) | 0.97 (0.69-1.32) |
| Rosacea | 24 (2.5) | 31168 (3.3) | 0.75 (0.48-1.09) | 0.84 (0.54-1.23) | 0.87 (0.56-1.28) |
| Seborrheic dermatitis | 67 (7) | 50888 (5.4) | 1.31 (1.01-1.66) | 1.36 (1.05-1.73) | 1.37 (1.06-1.74) |
| Urticaria | 54 (5.6) | 54154 (5.8) | 0.97 (0.73-1.27) | 1.03 (0.77-1.34) | 1.03 (0.77-1.34) |
| Vitiligo | <5 | 4121 (0.4) | 0.95 (0.29-2.21) | 0.97 (0.30-2.26) | 1.00 (0.31-2.34) |

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.



A.



B.

Figure A6. Prevalence and odds ratios of individual conditions related to the special senses in adults with HIV compared to those without HIV.

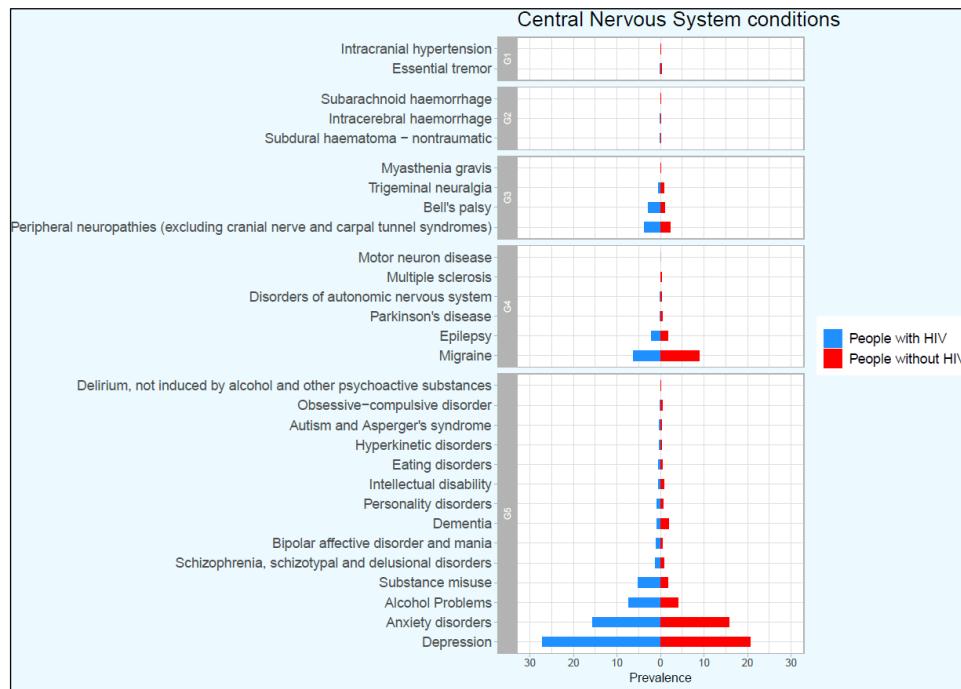
HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.

G1 = Eye_ENT Disorder, G2 = Dermatology.

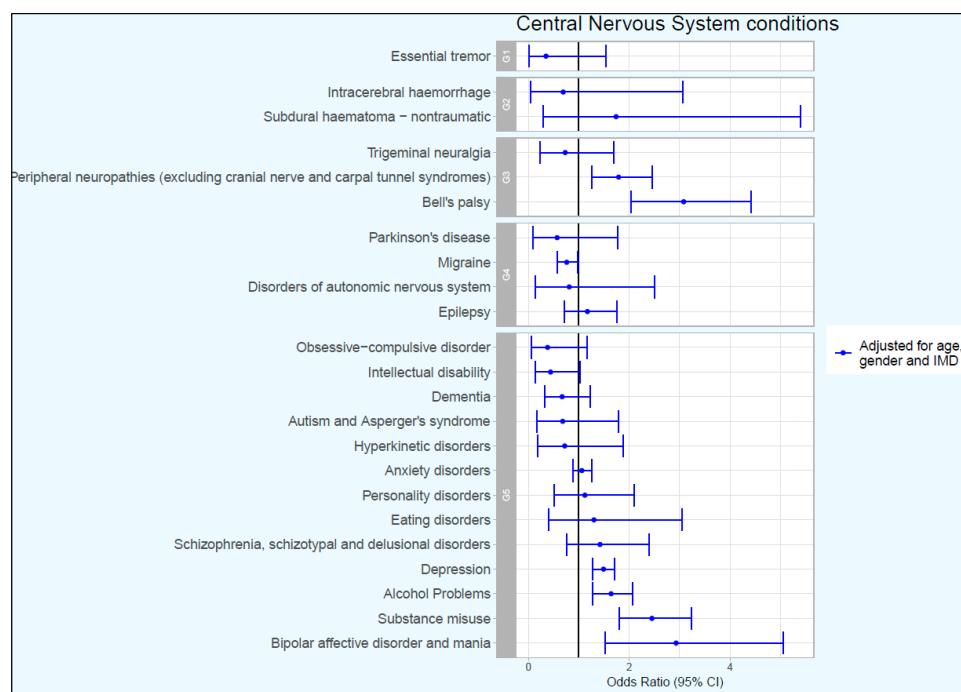
Table A9. Prevalence and odds ratios of individual CNS-related conditions in adults with HIV compared to those without HIV.

| Health condition | People with HIV, n (%) (N=964) | People without HIV, n (%) (N=941113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|---|--------------------------------|--------------------------------------|------------------------|--------------------------------------|---|
| CNS Neurological | | | | | |
| Disorders of autonomic nervous system | <5 | 2560 (0.3) | 0.76 (0.13-2.36) | 0.86 (0.14-2.68) | 0.81 (0.13-2.50) |
| Epilepsy | 20 (2.1) | 15491 (1.6) | 1.27 (0.79-1.92) | 1.27 (0.79-1.92) | 1.17 (0.72-1.76) |
| Migraine | 60 (6.2) | 83581 (8.9) | 0.68 (0.52-0.88) | 0.76 (0.58-0.98) | 0.76 (0.58-0.98) |
| Parkinson's disease | <5 | 4032 (0.4) | 0.48 (0.08-1.50) | 0.58 (0.10-1.80) | 0.57 (0.09-1.77) |
| CNS Peripheral | | | | | |
| Bell's palsy | 27 (2.8) | 8867 (0.9) | 3.03 (2.02-4.35) | 3.24 (2.16-4.66) | 3.08 (2.04-4.42) |
| Peripheral neuropathies (excluding cranial nerve and carpal tunnel syndromes) | 36 (3.7) | 21665 (2.3) | 1.65 (1.16-2.26) | 1.84 (1.29-2.54) | 1.79 (1.25-2.46) |
| Trigeminal neuralgia | <5 | 6634 (0.7) | 0.59 (0.18-1.37) | 0.73 (0.23-1.71) | 0.73 (0.23-1.70) |
| CNS Haematological | | | | | |
| Intracerebral haemorrhage | <5 | 1528 (0.2) | 0.64 (0.04-2.82) | 0.74 (0.04-3.27) | 0.69 (0.04-3.07) |
| Subdural haematoma - nontraumatic | <5 | 1217 (0.1) | 1.61 (0.27-4.97) | 1.86 (0.31-5.79) | 1.74 (0.29-5.40) |
| CNS Other | | | | | |
| Essential tremor | <5 | 3214 (0.3) | 0.30 (0.02-1.34) | 0.35 (0.02-1.53) | 0.35 (0.02-1.53) |
| CNS Psychiatry | | | | | |
| Alcohol Problems | 71 (7.4) | 37330 (4) | 1.92 (1.50-2.43) | 1.85 (1.44-2.34) | 1.64 (1.27-2.07) |
| Anxiety disorders | 151 (15.7) | 147314 (15.7) | 1.00 (0.84-1.19) | 1.11 (0.93-1.32) | 1.06 (0.88-1.25) |
| Autism and Asperger's syndrome | <5 | 3084 (0.3) | 0.95 (0.24-2.47) | 0.71 (0.18-1.85) | 0.68 (0.17-1.78) |
| Bipolar affective disorder and mania | 11 (1.1) | 3658 (0.4) | 2.96 (1.53-5.09) | 3.19 (1.65-5.49) | 2.93 (1.52-5.05) |
| Dementia | 9 (0.9) | 16674 (1.8) | 0.52 (0.25-0.95) | 0.73 (0.35-1.34) | 0.67 (0.32-1.22) |
| Depression | 261 (27.1) | 194874 (20.7) | 1.42 (1.23-1.64) | 1.61 (1.39-1.86) | 1.49 (1.28-1.71) |
| Eating disorders | <5 | 3728 (0.4) | 1.05 (0.32-2.44) | 1.24 (0.38-2.91) | 1.30 (0.40-3.05) |
| Hyperkinetic disorders | <5 | 2625 (0.3) | 1.12 (0.28-2.90) | 0.79 (0.20-2.06) | 0.72 (0.18-1.88) |
| Intellectual disability | <5 | 6717 (0.7) | 0.58 (0.18-1.35) | 0.52 (0.16-1.20) | 0.44 (0.14-1.03) |
| Obsessive-compulsive disorder | <5 | 5092 (0.5) | 0.38 (0.06-1.18) | 0.38 (0.06-1.17) | 0.38 (0.06-1.17) |
| Personality disorders | 8 (0.8) | 5926 (0.6) | 1.32 (0.60-2.47) | 1.33 (0.60-2.48) | 1.12 (0.51-2.10) |
| Schizophrenia, schizotypal and delusional disorders | 12 (1.2) | 6685 (0.7) | 1.76 (0.94-2.97) | 1.73 (0.92-2.92) | 1.42 (0.76-2.39) |
| Substance misuse | 50 (5.2) | 15215 (1.6) | 3.33 (2.47-4.38) | 2.97 (2.20-3.91) | 2.45 (1.81-3.23) |

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.



A.



B.

Figure A7. Prevalence and odds ratios of individual CNS-related conditions in adults with HIV compared to those without HIV.

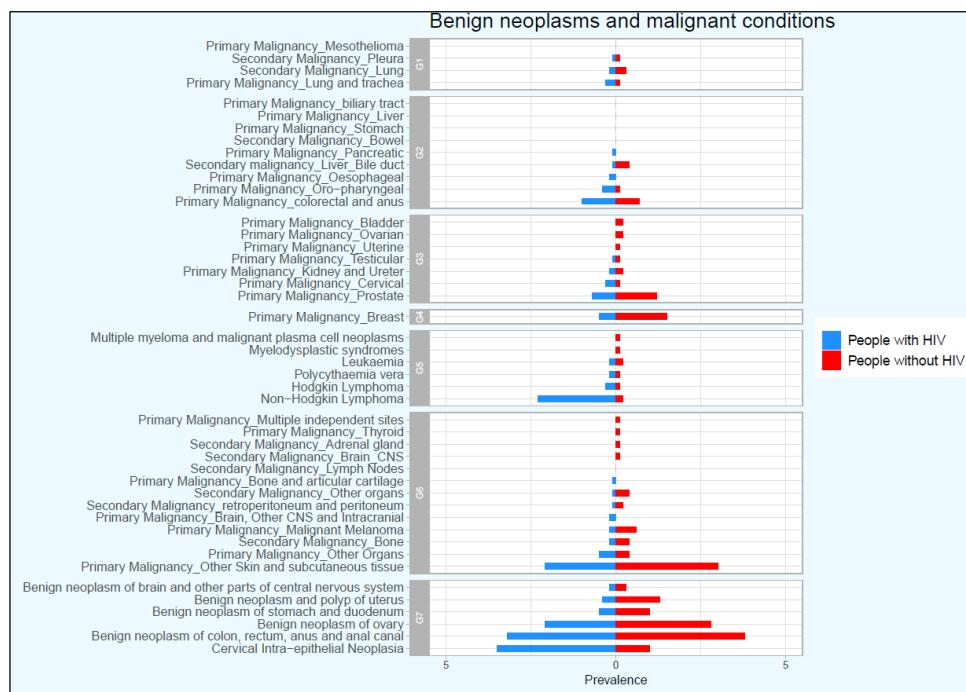
HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.

G1 = CNS_Other, G2 = CNS_Haem, G3 = CNS_Peripheral, G4 = CNS_Neuro, G5 = CNS_Psychiatry.

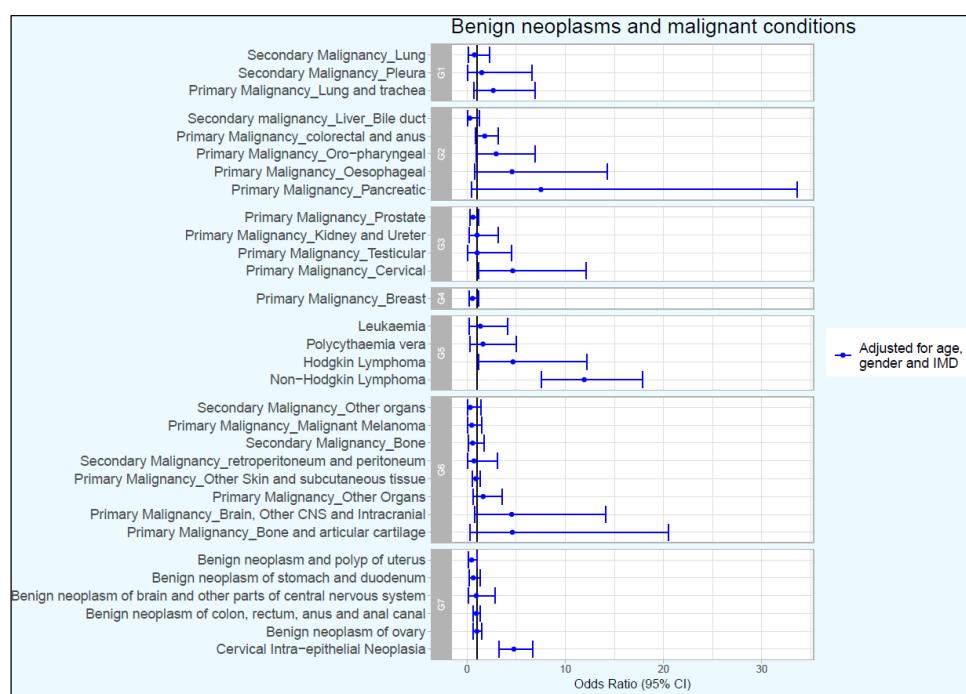
Table A10. Prevalence and odds ratios of individual benign neoplasms and malignant conditions in adults with HIV compared to those without HIV.

| Health condition | People with HIV, n (%) (N=964) | People without HIV, n (%) (N=941113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|--|--------------------------------|--------------------------------------|------------------------|--------------------------------------|---|
| Benign Neoplasms | | | | | |
| Benign neoplasm and polyp of uterus | <5 | 12627 (1.3) | 0.31 (0.09-0.71) | 0.44 (0.14-1.03) | 0.45 (0.14-1.04) |
| Benign neoplasm of brain and other parts of central nervous system | <5 | 2552 (0.3) | 0.76 (0.13-2.37) | 0.91 (0.15-2.81) | 0.92 (0.15-2.86) |
| Benign neoplasm of colon, rectum, anus and anal canal | 31 (3.2) | 35617 (3.8) | 0.84 (0.58-1.19) | 0.94 (0.64-1.33) | 0.93 (0.63-1.31) |
| Benign neoplasm of ovary | 20 (2.1) | 26131 (2.8) | 0.74 (0.46-1.12) | 0.99 (0.61-1.51) | 0.98 (0.60-1.50) |
| Benign neoplasm of stomach and duodenum | <5 | 9607 (1) | 0.51 (0.18-1.09) | 0.62 (0.22-1.35) | 0.62 (0.22-1.33) |
| Cervical Intra-epithelial Neoplasia | 34 (3.5) | 9359 (1) | 3.64 (2.53-5.04) | 4.94 (3.40-6.92) | 4.75 (3.28-6.66) |
| Malignancy Breast | | | | | |
| Primary Malignancy_Breast | <5 | 13999 (1.5) | 0.35 (0.12-0.74) | 0.53 (0.19-1.14) | 0.54 (0.19-1.18) |
| Malignancy GI | | | | | |
| Primary Malignancy_colorectal and anus | 10 (1) | 6550 (0.7) | 1.50 (0.75-2.63) | 1.80 (0.90-3.20) | 1.78 (0.88-3.15) |
| Primary Malignancy_Oesophageal | <5 | 459 (0) | 4.26 (0.71-13.24) | 4.80 (0.80-14.99) | 4.57 (0.76-14.26) |
| Primary Malignancy_Oro-pharyngeal | <5 | 1344 (0.1) | 2.91 (0.90-6.80) | 3.15 (0.97-7.37) | 2.95 (0.91-6.92) |
| Primary Malignancy_Pancreatic | <5 | 157 (0) | 6.22 (0.35-27.73) | 7.68 (0.44-34.33) | 7.51 (0.43-33.64) |
| Secondary malignancy_Liver_Bile duct | <5 | 3966 (0.4) | 0.25 (0.01-1.08) | 0.29 (0.02-1.27) | 0.27 (0.02-1.21) |
| Malignancy GU | | | | | |
| Primary Malignancy_Cervical | <5 | 822 (0.1) | 3.57 (0.89-9.31) | 5.12 (1.27-13.42) | 4.64 (1.15-12.15) |
| Primary Malignancy_Kidney and Ureter | <5 | 2139 (0.2) | 0.91 (0.15-2.83) | 1.03 (0.17-3.20) | 1.01 (0.17-3.13) |
| Primary Malignancy_Prostate | 7 (0.7) | 11539 (1.2) | 0.59 (0.25-1.14) | 0.58 (0.25-1.13) | 0.59 (0.25-1.17) |
| Primary Malignancy_Testicular | <5 | 819 (0.1) | 1.19 (0.07-5.26) | 0.98 (0.06-4.32) | 1.02 (0.06-4.50) |
| Malignancy Haem | | | | | |
| Hodgkin Lymphoma | <5 | 672 (0.1) | 4.37 (1.08-11.39) | 4.46 (1.10-11.63) | 4.66 (1.15-12.16) |
| Leukaemia | <5 | 1633 (0.2) | 1.20 (0.20-3.70) | 1.33 (0.22-4.11) | 1.34 (0.22-4.15) |
| Non-Hodgkin Lymphoma | 22 (2.3) | 2212 (0.2) | 9.91 (6.29-14.77) | 11.56 (7.30-17.30) | 11.92 (7.53-17.86) |
| Polycythaemia vera | <5 | 1187 (0.1) | 1.65 (0.27-5.10) | 1.73 (0.29-5.36) | 1.61 (0.27-4.99) |
| Malignancy Respiratory | | | | | |
| Primary Malignancy_Lung and trachea | <5 | 1188 (0.1) | 2.47 (0.61-6.43) | 3.04 (0.75-7.96) | 2.65 (0.66-6.94) |
| Secondary Malignancy_Lung | <5 | 2972 (0.3) | 0.66 (0.11-2.03) | 0.77 (0.13-2.39) | 0.73 (0.12-2.27) |
| Secondary Malignancy_Pleura | <5 | 781 (0.1) | 1.25 (0.07-5.52) | 1.54 (0.09-6.80) | 1.48 (0.08-6.56) |
| Malignancy Other | | | | | |
| Primary Malignancy_Bone and articular cartilage | <5 | 212 (0) | 4.61 (0.26-20.47) | 4.59 (0.26-20.43) | 4.61 (0.26-20.51) |
| Primary Malignancy_Brain, Other CNS and Intracranial | <5 | 438 (0) | 4.46 (0.74-13.87) | 4.49 (0.74-13.97) | 4.53 (0.75-14.10) |
| Primary Malignancy_Malignant Melanoma | <5 | 5405 (0.6) | 0.36 (0.06-1.11) | 0.43 (0.07-1.34) | 0.47 (0.08-1.47) |
| Primary Malignancy_Other Organs | <5 | 3379 (0.4) | 1.45 (0.52-3.12) | 1.71 (0.61-3.69) | 1.63 (0.58-3.54) |
| Primary Malignancy_Other Skin and subcutaneous tissue | 20 (2.1) | 28156 (3) | 0.69 (0.43-1.04) | 0.84 (0.51-1.28) | 0.89 (0.55-1.36) |
| Secondary Malignancy_Bone | <5 | 3841 (0.4) | 0.51 (0.08-1.57) | 0.59 (0.10-1.82) | 0.56 (0.09-1.74) |
| Secondary Malignancy_Other organs | <5 | 3541 (0.4) | 0.27 (0.02-1.21) | 0.32 (0.02-1.43) | 0.32 (0.02-1.40) |
| Secondary Malignancy_retroperitoneum and peritoneum | <5 | 1739 (0.2) | 0.56 (0.03-2.47) | 0.70 (0.04-3.09) | 0.69 (0.04-3.05) |

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.



A.



B.

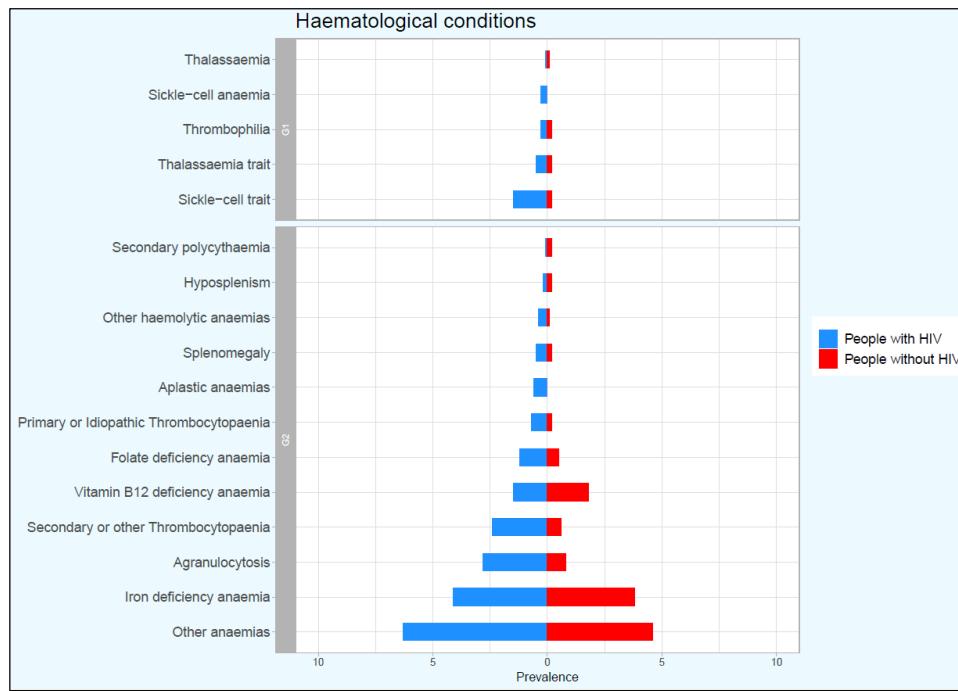
Figure A8. Prevalence and odds ratios of individual benign neoplasms and malignant conditions in adults with HIV compared to those without HIV.

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.

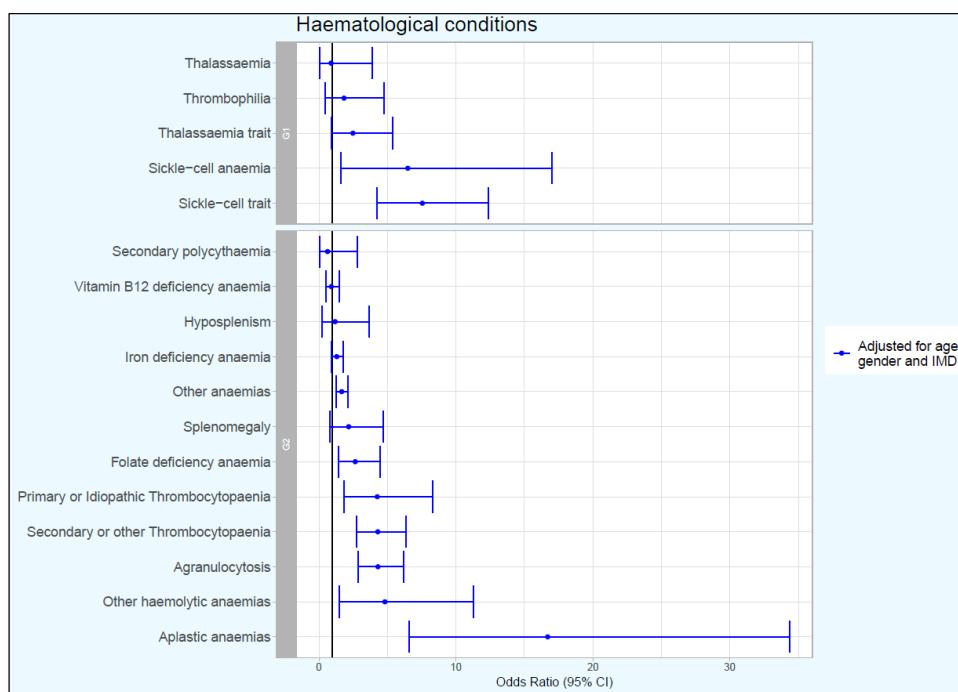
Table A11. Prevalence and odds ratios of individual haematological conditions in adults with HIV compared to those without HIV.

| Health condition | People with HIV, n (%) (N=964) | People without HIV, n (%) (N=941113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|---|-----------------------------------|---|------------------------|--------------------------------------|---|
| Acquired | | | | | |
| Agranulocytosis | 27 (2.8) | 7131 (0.8) | 3.77 (2.51-5.42) | 4.30 (2.85-6.18) | 4.31 (2.86-6.20) |
| Aplastic anaemias | 6 (0.6) | 390 (0) | 15.11 (5.96-30.95) | 16.99 (6.70-34.87) | 16.70 (6.58-34.34) |
| Folate deficiency anaemia | 12 (1.2) | 4421 (0.5) | 2.67 (1.42-4.50) | 3.18 (1.70-5.37) | 2.65 (1.41-4.49) |
| Hyposplenism | <5 | 1697 (0.2) | 1.15 (0.19-3.56) | 1.21 (0.20-3.75) | 1.18 (0.20-3.65) |
| Iron deficiency anaemia | 40 (4.1) | 35663 (3.8) | 1.10 (0.79-1.49) | 1.39 (0.99-1.89) | 1.30 (0.93-1.77) |
| Other anaemias | 61 (6.3) | 43665 (4.6) | 1.39 (1.06-1.78) | 1.79 (1.36-2.31) | 1.66 (1.26-2.14) |
| Other haemolytic anaemias | <5 | 838 (0.1) | 4.68 (1.45-10.92) | 4.82 (1.49-11.26) | 4.82 (1.49-11.28) |
| Primary or Idiopathic Thrombocytopaenia | 7 (0.7) | 1778 (0.2) | 3.86 (1.66-7.51) | 4.19 (1.79-8.15) | 4.26 (1.82-8.28) |
| Secondary or other Thrombocytopaenia | 23 (2.4) | 5684 (0.6) | 4.02 (2.58-5.94) | 4.49 (2.88-6.64) | 4.30 (2.75-6.36) |
| Secondary polycythaemia | <5 | 1441 (0.2) | 0.68 (0.04-2.99) | 0.70 (0.04-3.08) | 0.63 (0.04-2.78) |
| Splenomegaly | <5 | 2114 (0.2) | 2.32 (0.83-5.00) | 2.32 (0.83-5.02) | 2.17 (0.78-4.69) |
| Vitamin B12 deficiency anaemia | 14 (1.5) | 16677 (1.8) | 0.82 (0.46-1.33) | 0.99 (0.56-1.62) | 0.90 (0.50-1.47) |
| Inherited | | | | | |
| Sickle-cell anaemia | <5 | 371 (0) | 7.92 (1.96-20.70) | 8.14 (2.02-21.31) | 6.49 (1.60-17.00) |
| Sickle-cell trait | 14 (1.5) | 1537 (0.2) | 9.01 (5.05-14.69) | 9.50 (5.32-15.52) | 7.55 (4.22-12.35) |
| Thalassaemia | <5 | 1111 (0.1) | 0.88 (0.05-3.88) | 0.94 (0.05-4.14) | 0.89 (0.05-3.92) |
| Thalassaemia trait | <5 | 1986 (0.2) | 2.47 (0.88-5.32) | 2.59 (0.93-5.60) | 2.48 (0.89-5.36) |
| Thrombophilia | <5 | 1872 (0.2) | 1.57 (0.39-4.08) | 1.77 (0.44-4.61) | 1.83 (0.45-4.77) |

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.



A.



B.

Figure A9. Prevalence and odds ratios of individual haematological conditions in adults with HIV compared to those without HIV.

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation.

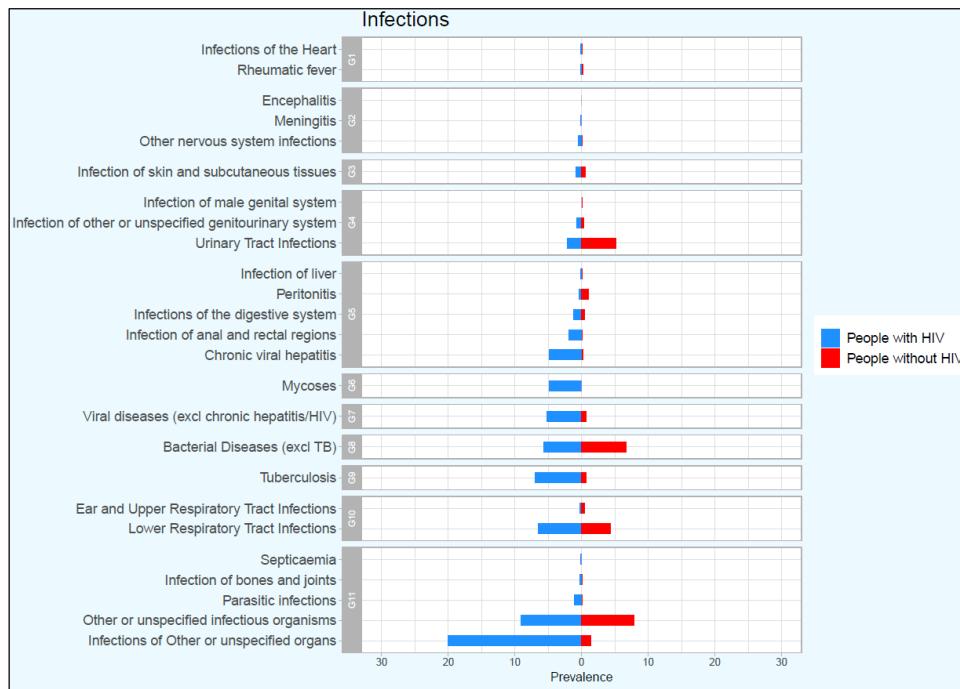
G1 = Malignancy_Respiratory, G2 = Malignancy_GI, G3 = Malignancy_GU, G4 = Malignancy_Breast, G5 = Malignancy_Haem, G6 = Malignancy_Other, G7 = Benign Neoplasms.

Table A12. Prevalence and odds ratios of individual infections in adults with HIV compared to those without HIV.

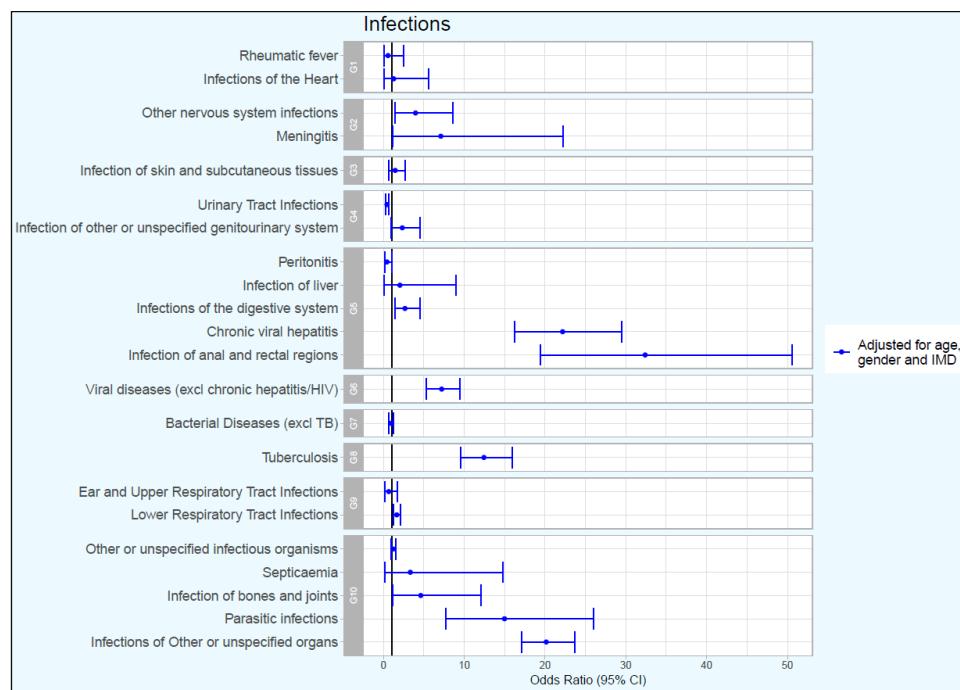
| Health condition | People with HIV, n (%) (N=964) | People without HIV, n (%) (N=94113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|--|--------------------------------|-------------------------------------|------------------------|--------------------------------------|---|
| Infection_Bacterial | | | | | |
| Bacterial Diseases (excl TB) | 55 (5.7) | 62884 (6.7) | 0.85 (0.64-1.10) | 1.01 (0.76-1.32) | 0.93 (0.70-1.21) |
| Infection_Viral | | | | | |
| Viral diseases (excl chronic hepatitis/HIV) | 50 (5.2) | 6898 (0.7) | 7.41 (5.50-9.75) | 7.68 (5.70-10.11) | 7.20 (5.34-9.48) |
| Infection_Mycoses | | | | | |
| Mycoses | 47 (4.9) | 432 (0) | 111.61 (81.02-150.20) | 120.86 (87.39-163.44) | 114.49 (82.61-155.17) |
| Infection_TB | | | | | |
| Tuberculosis | 67 (7) | 6147 (0.7) | 11.36 (8.77-14.46) | 13.55 (10.42-17.33) | 12.43 (9.56-15.90) |
| Infection_CNS | | | | | |
| Meningitis | <5 | 257 (0) | 7.61 (1.26-23.73) | 7.11 (1.18-22.21) | 7.10 (1.17-22.20) |
| Other nervous system infections | <5 | 1294 (0.1) | 3.79 (1.35-8.18) | 4.21 (1.50-9.10) | 3.97 (1.42-8.60) |
| Infection_CVS | | | | | |
| Infections of the Heart | <5 | 740 (0.1) | 1.32 (0.08-5.83) | 1.29 (0.07-5.72) | 1.26 (0.07-5.56) |
| Rheumatic fever | <5 | 2171 (0.2) | 0.45 (0.03-1.98) | 0.56 (0.03-2.49) | 0.56 (0.03-2.47) |
| Infection_GI | | | | | |
| Chronic viral hepatitis | 47 (4.9) | 1804 (0.2) | 26.69 (19.57-35.48) | 25.99 (19.05-34.57) | 22.17 (16.23-29.53) |
| Infection of anal and rectal regions | 18 (1.9) | 556 (0.1) | 32.19 (19.32-50.10) | 35.87 (21.50-55.96) | 32.39 (19.39-50.61) |
| Infection of liver | <5 | 473 (0.1) | 2.07 (0.12-9.13) | 2.26 (0.13-10.02) | 2.03 (0.12-9.00) |
| Infections of the digestive system | 12 (1.2) | 4070 (0.4) | 2.90 (1.55-4.89) | 3.09 (1.65-5.22) | 2.66 (1.42-4.50) |
| Peritonitis | <5 | 9467 (1) | 0.41 (0.13-0.96) | 0.45 (0.14-1.05) | 0.43 (0.13-1.00) |
| Infection_GU | | | | | |
| Infection of other or unspecified genitourinary system | 7 (0.7) | 3192 (0.3) | 2.15 (0.92-4.17) | 2.62 (1.12-5.12) | 2.33 (0.99-4.54) |
| Urinary Tract Infections | 20 (2.1) | 49211 (5.2) | 0.38 (0.24-0.58) | 0.47 (0.29-0.72) | 0.43 (0.27-0.66) |
| Infection_Respiratory | | | | | |
| Ear and Upper Respiratory Tract Infections | <5 | 3985 (0.4) | 0.73 (0.18-1.91) | 0.69 (0.17-1.79) | 0.65 (0.16-1.69) |
| Lower Respiratory Tract Infections | 63 (6.5) | 40323 (4.3) | 1.56 (1.20-2.00) | 1.90 (1.45-2.45) | 1.65 (1.26-2.13) |
| Infection_Skin | | | | | |
| Infection of skin and subcutaneous tissues | 8 (0.8) | 4628 (0.5) | 1.69 (0.77-3.17) | 1.56 (0.71-2.92) | 1.45 (0.66-2.70) |
| Infection_Other | | | | | |
| Infection of bones and joints | <5 | 621 (0.1) | 4.73 (1.17-12.33) | 5.04 (1.25-13.18) | 4.61 (1.14-12.05) |
| Infections of Other or unspecified organs | 194 (20.1) | 12729 (1.4) | 18.38 (15.64-21.48) | 21.98 (18.64-25.81) | 20.14 (17.06-23.65) |
| Other or unspecified infectious organisms | 88 (9.1) | 73397 (7.8) | 1.19 (0.95-1.47) | 1.34 (1.06-1.66) | 1.20 (0.96-1.49) |
| Parasitic infections | 11 (1.1) | 651 (0.1) | 16.67 (8.60-28.84) | 16.73 (8.62-28.96) | 14.98 (7.72-25.96) |
| Septicaemia | <5 | 269 (0) | 3.63 (0.21-16.11) | 3.48 (0.20-15.46) | 3.32 (0.19-14.77) |

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation. TB=tuberculosis.

CNS=central nervous system. CVS=cardiovascular. GI=gastrointestinal. GU=genitourinary.



A.



B.

Figure A10. Prevalence and odds ratios of individual infections in adults with HIV compared to those without HIV.

HIV=human immunodeficiency virus. 95%CI=95% confidence interval. OR=odds ratio. IMD = index of multiple deprivation. TB=tuberculosis. CNS=central nervous system. CVS=cardiovascular. GI=gastrointestinal. GU=genitourinary.

G1 = Infection_CVS, G2 = Infection_CNS, G3 = Infection_Skin, G4 = Infection_GU, G5 = Infection_GI, G6 = Infection_Mycoses, G7 = Infection_Viral, G8 = Infection_Bacterial, G9 = Infection_TB, G10 = Infection_Respiratory, G11 = Infection_Other.

Table A13. Prevalence and odds ratios of individual liver disorders in adults with HIV compared to those without HIV.

| Health condition | People with HIV, n (%) (N=964) | People without HIV, n (%) (N=941113) | Unadjusted OR (95% CI) | Adjusted for age and sex OR (95% CI) | Adjusted for age, sex and IMD OR (95% CI) |
|---|-----------------------------------|---|------------------------|--------------------------------------|---|
| Liver disorder | | | | | |
| Alcoholic liver disease | <5 | 1766 (0.2) | 1.66 (0.41-4.32) | 1.64 (0.41-4.26) | 1.41 (0.35-3.68) |
| Fatty Liver | 11 (1.1) | 8169 (0.9) | 1.32 (0.68-2.27) | 1.39 (0.72-2.39) | 1.28 (0.66-2.20) |
| Liver failure | <5 | 759 (0.1) | 2.58 (0.43-7.99) | 2.59 (0.43-8.03) | 2.12 (0.35-6.57) |
| Liver fibrosis, sclerosis and cirrhosis | 15 (1.6) | 4124 (0.4) | 3.59 (2.06-5.76) | 3.75 (2.15-6.03) | 3.23 (1.85-5.20) |
| Oesophageal varices | <5 | 1067 (0.1) | 2.75 (0.68-7.16) | 2.84 (0.71-7.41) | 2.51 (0.62-6.56) |
| Portal hypertension | <5 | 1866 (0.2) | 2.62 (0.94-5.67) | 2.69 (0.96-5.81) | 2.32 (0.83-5.01) |