June 13, 2022

**Appendix – Tenofovir disoproxil fumarate and COVID-19 outcomes in men with HIV**

Table of Contents

[Appendix Table 1. Definition of comorbidities and associated ICD-10 diagnosis codes 2](#_Toc105932117)

[Appendix Table 2. Hazard ratio (HR) estimates for COVID-19-related outcomes by NRTI combination in men with HIV, Veterans Aging Cohort Study, February 2020 – October 2021 3](#_Toc105932118)

[Appendix Table 3. Risks estimates for COVID-19-related outcomes by NRTI combination in men with HIV, with censoring at the time of death, Veterans Aging Cohort Study, February 2020 – October 2021 4](#_Toc105932119)

[Appendix Table 4. Risks estimates for COVID-19-related outcomes by NRTI combination in men with HIV, without censoring at the time of vaccination against COVID-19, Veterans Aging Cohort Study, February 2020 – October 2021 5](#_Toc105932120)

[Appendix Table 5. Risks estimates for COVID-19-related outcomes by NRTI combination in men and women with HIV, Veterans Aging Cohort Study, February 2020 – October 2021 6](#_Toc105932121)

[Appendix Table 6. Risks estimates for all-cause mortality by NRTI combination in men with HIV, Veterans Aging Cohort Study, February 2020 – October 2021 7](#_Toc105932122)

[Appendix Table 7. Subgroup analyses for COVID-19-related outcomes by NRTI combination in men with HIV, Veterans Aging Cohort Study, February 2020 – October 2021 8](#_Toc105932123)

[Appendix Figure 1. Comparison of trends of COVID-19 cases in the study population and in the United States 10](#_Toc105932124)

[Appendix Figure 2. The number of SARS-CoV-2 tests proportional to persons under follow-up in each month by treatment groups 11](#_Toc105932125)

# Appendix Table 1. Definition of comorbidities and associated ICD-10 diagnosis codes

|  |  |
| --- | --- |
| Comorbidity | ICD10 |
| Acute myocardial infarction | I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I21.9, I22.0, I24.0 |
| Heart failure | I11.0, I13.0, I13.2, I50.1, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33 |
| Hypertension | I10, I11, I12, I13, I15, I16 |
| Ischemic stroke | I6302, I63.12, I63.22, I65.21, I65.22, I65.23, I65.29, I63.031, I63.032, I63.033, I63.039, I63.131, I63.132, I63.133, I63.139, I63.231, I63.232, I63.233, I63.239, I63.011, I63.012, I63.013, I63.019, I63.111, I63.112, I63.113, I63.119, I63.211, I63.212, I63.213, I63.219, I63.59, I63.09, I63.19, I63.59, I63.00, I63.10, I63.20, I63.29, I66.01, I66.02, I66.03, I66.09, I66.11, I66.12, I66.13, I66.19, I66.21, I66.22, I66.23, I66.29, I66.3, I63.30, I63.311, I63.312, I63.313, I63.319, I63.321, I63.322, I63.323, I63.329, I63.331, I63.332, I63.333, I63.339, I63.341, I63.342, I63.343, I63.349, I63.39, I63.6, I63.40, I63.411, I63.412, I63.413, I63.419, I63.421, I63.422, I63.423, I63.429, I63.431, I63.432, I63.433, I63.439, I63.441, I63.442, I63.443, I63.449, I63.49, I63.50, I63.511, I63.512, I63.513, I63.519, I63.521, I63.522, I63.523, I63.529, I63.531, I63.532, I63.533, I63.539, I63.541, I63.542, I63.543, I63.549, I63.59, I63.8, I63.9, I6789 |
| Unstable Angina | I24.1, I20.0, I25.110, I25.700, I25.710, I25.720, I25.730, I25.750, I25.760, I25.790, I24.0, I24.8, I24.9 |
| Chronic kidney disease | N19, N18, I12.0, I13.1, N03.2, N03.3, N03.4, N03.5, N03.6, N03.7, N05.2, N05.3, N05.4, N05.5, N05.6, N05.7, N25.0, Z49.0, Z49.1, Z49.2, Z94.0, Z99.2 |
| Cancers | C00-C43, C45-C76, C80-C96, C7A |
| Metastatic cancer | C77, C78, C79, C80 |
| Hepatitis B | B16, B18.0, B18.1, B19.1, Z22.51 |
| Hepatitis C | B17.10, B17.11, B18.2, B19.20, B19.21, Z22.52 |
| Mild liver disease | B18, K73, K70.3, K71.7, K74.3, K74.4, K74.5, K74.6, K70.0, K70.1, K70.2, K70.9, K71.3, K71.4, K71.5, K74.0, K74.1, K74.2, K76.0, K76.2, K76.3, K76.4, K76.8, K76.9, Z94.4 |
| Severe liver disease | K72.1, K72.9, K76.6, K76.7, I85.0, I85.9, I86.4, I98.2, K70.4, K71.1, K76.5 |
| Asthma | J45 |
| Chronic obstructive pulmonary disease  | J41.0, J41.1, J41.8, J42, J43.0, J43.1, J43.2, J43.8, J43.9, J44.0, J44.1, J44.9 |
| Pneumonia, bacterial | J13, J14, J16.0, J15, J16.8, J17, J18, J09.X1, J09.X2, J10.1, J11.1, J10.0, J11.0 J12 |
| Pneumonia, NOS |
| Pneumonia, viral |
| Bronchiectasis | J47, J84, NOT = J84.8, J84.89, I27 |
| Pulmonary fibrosis |
| Pulmonary hypertension |
| Alcohol use disorder | F10.120, F10.121, F10.129, F10.150, F10.151, F10.159, F10.180, F10.181, F10.182, F10.188, F10.220, F10.221, F10.229, F10.230, F10.231, F10.232, F10.239, F10.250, F10.251, F10.259, F10.280, F10.281, F10.282, F10.288, F10.10, F10.11, F10.14, F10.19, F10.20, F10.21, F10.24, F10.25, F10.26, F10.27, F10.29 |
| Opioid use disorder | F11.120, F11.121, F11.122, F11.129, F11.150, F11.151, F11.159, F11.181, F11.182, F11.188, F11.220, F11.221, F11.222, F11.229, F11.250, F11.251, F11.259, F11.281, F11.282, F11.288, F11.920, F11.921, F11.922, F11.929, F11.950, F11.951, F11.959, F11.981, F11.982, F11.988 F11.10, F11.11, F11.14, F11.19, F11.20, F11.21, F11.23, F11.24, F11.29, F11.90, F11.93, F11.94, F11.99 |
| Diabetes | E08, E10, E11, E13 |
| Dementia | F00, F01, F02, F03, G30, F05.1, G31.1 |
| Rheumatoid arthritis | M05, M32, M34, M06.0, M06.1, M06.2, M06.3, M06.4, M06.8, M06.9, M31.5, M33.2, M35.3, M33.0, M33.1, M33.9, M35.1, M36.0 |
| Osteoporosis | M80, M81 |

# Appendix Table 2. Hazard ratio (HR) estimates for COVID-19-related outcomes by NRTI combination in men with HIV, Veterans Aging Cohort Study, February 2020 – October 2021

#

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | No. events (up to 20 months) | Crude HR(95% CI) | Adjusted\* HR(95% CI) |
| DocumentedSARS-CoV-2infection | TAF/FTC | 638 | 1 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 30 | 0.59 | (0.41, 0.85) | 0.64 | (0.44, 0.93) |
| ABC/3TC | 205 | 1.07 | (0.91, 1.25) | 1.03 | (0.88, 1.20) |
| Other | 138 | 0.89 | (0.74, 1.07) | 0.85 | (0.71, 1.03) |
| COVID-19hospitalization | TAF/FTC | 160 | 1 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 5 | 0.39 | (0.16, 0.96) | 0.41 | (0.17, 1.02) |
| ABC/3TC | 64 | 1.33 | (0.99, 1.77) | 1.15 | (0.86, 1.54) |
| Other | 62 | 1.60 | (1.20, 2.15) | 1.15 | (0.85, 1.57) |
| COVID-19 ICU admission | TAF/FTC | 45 | 1 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 2 | 0.57 | (0.14, 2.35) | 0.61 | (0.15, 2.57) |
| ABC/3TC | 18 | 1.33 | (0.77, 2.29) | 1.00 | (0.56, 1.76) |
| Other | 24 | 2.22 | (1.35, 3.64) | 1.51 | (0.89, 2.55) |
| \* Adjusted for age, race/ethnicity, smoking status, CD4 cell count, HIV viral load, maximum HIV viral load over the past 12 months, BMI, systolic blood pressure, diastolic blood pressure, average eGFR over the past 12 months, months since February 2020, hospitalization in previous month, comorbidities including: cardiovascular disease, hypertension, liver disease, chronic pulmonary disease, cancer, chronic kidney disease, alcohol/substance use, diabetes, and dementia. |

Abbreviations: 3TC – lamivudine; ABC – abacavir; FTC – emtricitabine; NRTI – nucleoside reverse transcriptase inhibitor; TDF – tenofovir disoproxil fumarate; TAF – tenofovir alafenamide; BMI – body mass index; eGFR – estimated glomerular filtration rate

# Appendix Table 3. Risks estimates for COVID-19-related outcomes by NRTI combination in men with HIV, with censoring at the time of death, Veterans Aging Cohort Study, February 2020 – October 2021

#

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | No. events | 18-month risk\*, %(95% CI) | Risk difference, %(95% CI) | Risk ratio(95% CI) |
| DocumentedSARS-CoV-2infection | TAF/FTC | 621 | 7.8 | (7.1, 8.4) | 0 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 28 | 5.1 | (3.3, 7.0) | -2.6 | (-4.5, -0.8) | 0.66 | (0.43, 0.89) |
| ABC/3TC | 201 | 7.8 | (6.6, 8.9) | 0.0 | (-1.3, 1.3) | 1.00 | (0.84, 1.17) |
| Other | 134 | 7.0 | (5.7, 8.2) | -0.8 | (-2.3, 0.5) | 0.90 | (0.71, 1.07) |
| COVID-19hospitalization | TAF/FTC | 156 | 2.2 | (1.8, 2.5) | 0 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 5 | 0.9 | (0.2, 2.0) | -1.2 | (-2.1, -0.2) | 0.44 | (0.07, 0.89) |
| ABC/3TC | 63 | 2.3 | (1.7, 3.0) | 0.2 | (-0.5, 0.9) | 1.08 | (0.79, 1.48) |
| Other | 60 | 2.8 | (2.0, 3.7) | 0.7 | (-0.1, 1.5) | 1.31 | (0.94, 1.76) |
| COVID-19 ICU admission | TAF/FTC | 43 | 0.6 | (0.4, 0.8) | 0 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 2 | 0.3 | (0.0, 1.6) | -0.2 | (-0.7, 1.1) | 0.57 | (0.00, 2.84) |
| ABC/3TC | 18 | 0.5 | (0.3, 0.9) | 0.0 | (-0.3, 0.4) | 0.93 | (0.49, 1.82) |
| Other | 24 | 0.8 | (0.5, 1.1) | 0.2 | (-0.2, 0.6) | 1.38 | (0.74, 2.44) |
| \* Standardized by age, race/ethnicity, smoking status, CD4 cell count, HIV viral load, maximum HIV viral load over the past 12 months, BMI, systolic blood pressure, diastolic blood pressure, average eGFR over the past 12 months, months since February 2020, hospitalization in previous month, comorbidities including: cardiovascular disease, hypertension, liver disease, chronic pulmonary disease, cancer, chronic kidney disease, alcohol/substance use, diabetes, and dementia. |

# Appendix Table 4. Risks estimates for COVID-19-related outcomes by NRTI combination in men with HIV, without censoring at the time of vaccination against COVID-19, Veterans Aging Cohort Study, February 2020 – October 2021

#

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | No. events | 18-month risk\*, %(95% CI) | Risk difference, %(95% CI) | Risk ratio(95% CI) |
| Documented SARS-CoV-2 infection | TAF/FTC | 706 | 5.9 | (5.4, 6.3) | 0 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 31 | 3.9 | (2.7, 5.2) | -1.9 | (-3.3, -0.7) | 0.67 | (0.46, 0.88) |
| ABC/3TC | 233 | 6.2 | (5.5, 7.0) | 0.4 | (-0.5, 1.2) | 1.06 | (0.92, 1.22) |
| Other | 162 | 5.6 | (4.7, 6.4) | -0.3 | (-1.2, 0.6) | 0.95 | (0.80, 1.10) |
| COVID-19hospitalization | TAF/FTC | 175 | 1.6 | (1.3, 1.8) | 0 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 6 | 0.7 | (0.2, 1.3) | -0.9 | (-1.4, -0.2) | 0.45 | (0.14, 0.84) |
| ABC/3TC | 69 | 1.7 | (1.3, 2.1) | 0.1 | (-0.3, 0.6) | 1.07 | (0.80, 1.39) |
| Other | 68 | 1.9 | (1.5, 2.3) | 0.3 | (-0.2, 0.8) | 1.20 | (0.91, 1.55) |
| COVID-19 ICU admission | TAF/FTC | 47 | 0.4 | (0.3, 0.6) | 0 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 2 | 0.2 | (0.0, 0.7) | -0.2 | (-0.5, 0.2) | 0.48 | (0.00, 1.51) |
| ABC/3TC | 21 | 0.5 | (0.3, 0.7) | 0.0 | (-0.2, 0.3) | 1.03 | (0.60, 1.69) |
| Other | 28 | 0.7 | (0.4, 1.0) | 0.3 | (0.0, 0.6) | 1.62 | (0.93, 2.62) |
| \* Standardized by age, race/ethnicity, smoking status, CD4 cell count, HIV viral load, maximum HIV viral load over the past 12 months, BMI, systolic blood pressure, diastolic blood pressure, average eGFR over the past 12 months, months since February 2020, hospitalization in previous month, comorbidities including: cardiovascular disease, hypertension, liver disease, chronic pulmonary disease, cancer, chronic kidney disease, alcohol/substance use, diabetes, and dementia. |

# Appendix Table 5. Risks estimates for COVID-19-related outcomes by NRTI combination in men and women with HIV, Veterans Aging Cohort Study, February 2020 – October 2021

#

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | No. events | 18-month risk\*, %(95% CI) | Risk difference, %(95% CI) | Risk ratio(95% CI) |
| Documented SARS-CoV-2 infection | TAF/FTC | 638 | 7.4 | (6.8, 8.0) | 0 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 29 | 4.9 | (3.2, 6.6) | -2.5 | (-4.3, -0.7) | 0.66 | (0.41, 0.90) |
| ABC/3TC | 208 | 7.5 | (6.5, 8.6) | 0.1 | (-1.1, 1.3) | 1.02 | (0.86, 1.18) |
| Other | 136 | 6.4 | (5.3, 7.5) | -1.0 | (-2.2, 0.1) | 0.86 | (0.71, 1.02) |
| COVID-19 hospitalization | TAF/FTC | 160 | 2.0 | (1.6, 2.4) | 0 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 5 | 0.8 | (0.2, 1.8) | -1.1 | (-1.9, -0.1) | 0.42 | (0.11, 0.94) |
| ABC/3TC | 65 | 2.2 | (1.6, 2.8) | 0.2 | (-0.4, 0.8) | 1.10 | (0.80, 1.46) |
| Other | 60 | 2.3 | (1.7, 3.0) | 0.3 | (-0.4, 1.1) | 1.17 | (0.84, 1.59) |
| COVID-19ICU admission | TAF/FTC | 44 | 0.5 | (0.4, 0.7) | 0 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 2 | 0.3 | (0.0, 1.2) | -0.2 | (-0.6, 0.7) | 0.54 | (0.00, 2.30) |
| ABC/3TC | 18 | 0.5 | (0.3, 0.8) | 0.0 | (-0.3, 0.3) | 0.91 | (0.49, 1.62) |
| Other | 24 | 0.7 | (0.4, 1.0) | 0.2 | (-0.1, 0.5) | 1.30 | (0.77, 2.21) |
| \* Standardized by age, race/ethnicity, smoking status, CD4 cell count, HIV viral load, maximum HIV viral load over the past 12 months, BMI, systolic blood pressure, diastolic blood pressure, average eGFR over the past 12 months, months since February 2020, hospitalization in previous month, comorbidities including: cardiovascular disease, hypertension, liver disease, chronic pulmonary disease, cancer, chronic kidney disease, alcohol/substance use, diabetes, and dementia. |

# Appendix Table 6. Risks estimates for all-cause mortality by NRTI combination in men with HIV, Veterans Aging Cohort Study, February 2020 – October 2021

#

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | No. events | 18-month risk\*, % (95% CI) | Risk difference, % (95% CI) | Risk ratio (95% CI) | Crude HR(95% CI) | Adjusted\*\* HR(95% CI) |
| TAF/FTC | 332 | 4.6 | (4.1, 5.2) | 0 (ref.) |  | 1 (ref.) |  | 1 (ref.) |  | 1 (ref.) |  |
| TDF/FTC | 34 | 5.4 | (3.5, 7.3) | 0.8 | (-1.2, 2.9) | 1.18 | (0.75, 1.66) | 1.30 | (0.91, 1.85) | 1.36 | (0.95, 1.94) |
| ABC/3TC | 120 | 4.8 | (3.9, 5.9) | 0.2 | (-0.9, 1.4) | 1.04 | (0.81, 1.32) | 1.20 | (0.98, 1.48) | 1.08 | (0.87, 1.34) |
| Other | 189 | 7.2 | (6.1, 8.4) | 2.6 | (1.4, 3.8) | 1.56 | (1.29, 1.88) | 2.42 | (2.02, 2.89) | 1.62 | (1.35, 1.95) |
| \* Standardized by age, race/ethnicity, smoking status, CD4 cell count, HIV viral load, maximum HIV viral load over the past 12 months, BMI, systolic blood pressure, diastolic blood pressure, average eGFR over the past 12 months, months since February 2020, hospitalization in previous month, comorbidities including: cardiovascular disease, hypertension, liver disease, chronic pulmonary disease, cancer, chronic kidney disease, alcohol/substance use, diabetes, and dementia. \*\* Adjusted for all variables listed in \* |

# Appendix Table 7. Subgroup analyses for COVID-19-related outcomes by NRTI combination in men with HIV, Veterans Aging Cohort Study, February 2020 – October 2021

#

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | No. events | 18-month risk\*, %(95% CI) | Risk difference, %(95% CI) | Risk ratio(95% CI) |
| Documented SARS-CoV-2 infection | Non-Hispanic White | TAF/FTC | 195 | 6.2 | (5.3, 7.1) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 6 | 2.1 | (0.4, 3.9) | -4.1 | (-5.8, -2.0) | 0.34 | (0.07, 0.65) |
| ABC/3TC | 42 | 5.3 | (3.6, 7.2) | -1.0 | (-2.8, 1.1) | 0.85 | (0.57, 1.18) |
| Other | 32 | 4.8 | (3.1, 6.5) | -1.4 | (-3.2, 0.7) | 0.78 | (0.50, 1.12) |
| Non-Hispanic Black | TAF/FTC | 286 | 8.1 | (7.0, 9.0) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 15 | 6.0 | (3.2, 9.0) | -2.1 | (-5.0, 1.2) | 0.74 | (0.39, 1.15) |
| ABC/3TC | 127 | 9.1 | (7.7, 10.9) | 1.1 | (-0.6, 3.1) | 1.14 | (0.93, 1.40) |
| Other | 73 | 7.0 | (5.4, 8.6) | -1.0 | (-3.0, 0.8) | 0.87 | (0.66, 1.10) |
| Age ≥ 50 years | TAF/FTC | 450 | 7.1 | (6.4, 7.7) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 19 | 4.5 | (2.6, 6.6) | -2.6 | (-4.5, -0.4) | 0.64 | (0.38, 0.95) |
| ABC/3TC | 150 | 7.2 | (6.1, 8.3) | 0.1 | (-1.1, 1.4) | 1.02 | (0.85, 1.21) |
| Other | 107 | 6.0 | (4.9, 7.2) | -1.0 | (-2.3, 0.4) | 0.86 | (0.68, 1.05) |
| Age < 50 years | TAF/FTC | 171 | 8.8 | (7.5, 10.2) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 9 | 5.7 | (2.3, 10.0) | -3.0 | (-6.7, 1.1) | 0.65 | (0.26, 1.13) |
| ABC/3TC | 51 | 8.2 | (6.0, 10.7) | -0.6 | (-3.1, 2.0) | 0.94 | (0.68, 1.24) |
| Other | 27 | 8.5 | (5.5, 11.4) | -0.3 | (-3.8, 2.7) | 0.97 | (0.61, 1.36) |
| eGFR ≥ 60 mL/min | TAF/FTC | 393 | 7.2 | (6.4, 7.9) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 18 | 3.6 | (2.1, 5.5) | -3.5 | (-5.2, -1.7) | 0.51 | (0.29, 0.76) |
| ABC/3TC | 99 | 7.3 | (5.8, 8.8) | 0.2 | (-1.5, 1.7) | 1.02 | (0.80, 1.24) |
| Other | 71 | 6.6 | (5.2, 8.2) | -0.5 | (-2.2, 1.1) | 0.93 | (0.70, 1.16) |
| eGFR < 60 mL/min | TAF/FTC | 122 | 8.4 | (6.9, 10.1) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 4 | 8.0 | (0.0, 18.8) | -0.5 | (-7.6, 10.2) | 0.94 | (0.00, 2.32) |
| ABC/3TC | 66 | 8.3 | (6.3, 10.4) | -0.2 | (-2.9, 2.3) | 0.98 | (0.70, 1.33) |
| Other | 41 | 6.5 | (4.6, 8.6) | -1.9 | (-4.4, 0.7) | 0.77 | (0.52, 1.10) |
| COVID-19hospitalization | Non-Hispanic White | TAF/FTC | 33 | 1.0 | (0.7, 1.5) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 0 | 0.0 | - | -1.0 | - | 0.00 | - |
| ABC/3TC | 10 | 1.4 | (0.6, 2.5) | 0.4 | (-0.5, 1.5) | 1.40 | (0.56, 2.79) |
| Other | 14 | 2.1 | (1.0, 3.3) | 1.0 | (-0.1, 2.3) | 2.00 | (0.90, 3.77) |
| Non-Hispanic Black | TAF/FTC | 88 | 2.6 | (2.0, 3.2) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 3 | 1.1 | (0.0, 2.6) | -1.5 | (-2.7, 0.0) | 0.42 | (0.00, 1.00) |
| ABC/3TC | 47 | 3.1 | (2.2, 4.1) | 0.6 | (-0.5, 1.6) | 1.21 | (0.83, 1.73) |
| Other | 36 | 3.0 | (2.0, 4.0) | 0.4 | (-0.7, 1.6) | 1.15 | (0.75, 1.69) |
| Age ≥ 50 years | TAF/FTC | 136 | 2.2 | (1.8, 2.6) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 4 | 0.9 | (0.2, 2.3) | -1.3 | (-2.1, 0.0) | 0.42 | (0.07, 1.01) |
| ABC/3TC | 60 | 2.6 | (2.0, 3.4) | 0.4 | (-0.3, 1.3) | 1.19 | (0.86, 1.64) |
| Other | 54 | 2.5 | (1.8, 3.3) | 0.3 | (-0.5, 1.2) | 1.14 | (0.80, 1.61) |
| Age < 50 years | TAF/FTC | 20 | 1.1 | (0.6, 1.7) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 1 | 0.7 | (0.0, 2.6) | -0.4 | (-1.5, 1.5) | 0.66 | (0.00, 2.49) |
| ABC/3TC | 3 | 0.4 | (0.0, 1.4) | -0.7 | (-1.3, 0.2) | 0.35 | (0.00, 1.25) |
| Other | 6 | 2.3 | (0.7, 4.3) | 1.2 | (-0.5, 3.3) | 2.04 | (0.54, 5.33) |
| eGFR ≥ 60 mL/min | TAF/FTC | 81 | 1.7 | (1.3, 2.1) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 3 | 0.5 | (0.0, 1.1) | -1.2 | (-1.8, -0.5) | 0.28 | (0.00, 0.67) |
| ABC/3TC | 20 | 1.7 | (0.9, 2.5) | 0.0 | (-0.8, 0.9) | 1.00 | (0.55, 1.60) |
| Other | 23 | 2.1 | (1.3, 3.1) | 0.5 | (-0.4, 1.5) | 1.27 | (0.76, 2.03) |
| eGFR < 60 mL/min | TAF/FTC | 46 | 3.0 | (2.2, 4.1) | 0 (ref.) |   | 1 (ref.) |   |
| TDF/FTC | 1 | 5.5 | (0.0, 18.6) | 2.5 | (-3.7, 15.6) | 1.82 | (0.00, 6.32) |
| ABC/3TC | 29 | 3.4 | (2.1, 4.6) | 0.4 | (-1.2, 1.8) | 1.12 | (0.66, 1.74) |
| Other | 27 | 3.7 | (2.4, 5.5) | 0.7 | (-1.0, 2.5) | 1.22 | (0.72, 1.98) |
| \* Standardized by age, race/ethnicity, smoking status, CD4 cell count, HIV viral load, maximum HIV viral load over the past 12 months, BMI, systolic blood pressure, diastolic blood pressure, average eGFR over the past 12 months, months since February 2020, hospitalization in previous month, comorbidities including: cardiovascular disease, hypertension, liver disease, chronic pulmonary disease, cancer, chronic kidney disease, alcohol/substance use, diabetes, and dementia.  |

# Appendix Figure 1. Comparison of trends of COVID-19 cases in the study population and in the United States



# Appendix Figure 2. The number of SARS-CoV-2 tests proportional to persons under follow-up in each month by treatment groups

