

INCREASING CARDIOVASCULAR DISEASE INCIDENCE IN HIV-POSITIVE ADULTS IN ASIA: PROJECTIONS FOR 2017-2026

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Background: HIV is estimated to increase cardiovascular disease (CVD) risk by about two-fold. The number of HIV-positive individuals experiencing comorbid CVD is expected to rise as the HIV population ages, but CVD risk and management have received limited attention in HIV-positive adults in Asia. We projected the 10-year incidence of CVD based on a heterogeneous Asian HIV-positive cohort.

Methods: Analyses were based on patients recruited to the TREAT Asia HIV Observational Database, consisting of 20 sites in 12 countries. Patients were included if they started antiretroviral therapy (ART), were alive, had no CVD history, and had data on CVD risk factors. The D:A:D CVD risk equation was used to estimate annual new CVD events for 2017-2026, accounting for age- and sex-adjusted mortality. Projections were stratified by sex, age, diabetes, ART regimen, and country income group.

Results: Of 3406 included patients, 69% were male, median age was 45 (IQR 39-52) years, and median time since ART initiation was 8.1 (IQR 5.8-12.5) years. Cohort incidence rates of CVD were projected to increase from 7 per 1000 person-years (/1000pys) in 2017 to 14/1000pys in 2026. Stratified projections for 2026 showed a higher CVD event rate in men than women (18 vs. 5 events/1000pys), in older patients (31, 10 and 4 events/1000pys in those aged >50, 41-50 and ≤40 years, respectively), in diabetics (34 vs. 10 events/1000pys in non-diabetics), in

those on protease inhibitor-containing regimens (27 vs. 12 events/1000pys in other regimens), and in high-income countries (24 vs. 9 events/1000pys in upper-middle- and 9 in lower-middle-income countries).

Conclusions: Our projections suggest that CVD incidence rates in Asian HIV-positive adults in our cohort will double in the next decade. Risk screening, specifically in men, older patients, diabetics and those on protease inhibitor-containing regimens, is needed to support timely interventions and to reduce future CVD burden.

Disclosure of Interest Statement:

No conflicts of interest.