Background

Whether exposure to the nucleoside analogue reverse transcriptase inhibitor (NRTI) abacavir (ABC) contributes significantly to risk for myocardial infarction (MI) remains unclear. Several large observational studies have suggested increased risk associated with ABC use after adjustment for cardiovascular disease risk factors. The Data collection on Adverse events of Anti-HIV Drugs (D:A:D) found ABC use was associated with a nearly 2-fold increased MI risk in adjusted analytic models. These studies had either found no association between ABC use and MI risk or that ABC recipients were more likely to have pre-existing risks for MI (e.g., renal insufficiency), after adjustment for which, no significant association of ABC use with MI occurrence was apparent. We reevaluated MI risk associated with ABC use among participants in the largest collaborative cohort of studies of HIV-infected persons in North America.

Methods

Study Population

Individuals who screened positive, did not meet MI criteria, and underwent invasive cardiac procedures. We compared ABC users with non-ABC ART users:

- **Full Study Population:** There were 301 incident MIs that occurred among 16,733 adults who used ABC with MI occurrence was apparent.
- **Restricted study population:** only ART naïve persons observed to initiate ART were included to avoid confounding from pre-existing risks for MI (e.g., renal insufficiency).

 ltded events were classified by type as defined by the UDMI.

Definition of MI (UDMI) as either atherothrombotic (type 1) or demand ischemia (type 2).

Outcome: Myocardial Infarction (MI)

Participants in the NA-ACCORD, we identified increased risk for MI associated with recent ABC use that was:

- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;
- Significant in analytic models restricted to ART naïve persons observed to initiate ART, models did not achieve statistical significance in analytic models more fully adjusted for traditional CVD risks, many of which were more common among ABC users;