

Comparison of Abacavir/Lamivudine and Tenofovir/Emtricitabine Among Treatment-Naive HIV-Infected Patients Initiating Therapy

Darrell H. S. Tan, Keith Chan, Janet Raboud, Curtis Cooper, Julio S. G. Montaner, Sharon Walmsley, Robert S. Hogg, Marina B. Klein, Nima Machouf, Sean B. Rourke, Chris Tsoukas, Mona R. Loutfy, the CANOC Collaboration

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Objective

This study assessed the differences in efficacy, safety, and tolerability between abacavir/lamivudine (ABC/3TC) and tenofovir/emtricitabine (TDF/FTC) drug treatment regimens.

Main Finding

There was no difference in time to regimen failure, virologic failure, switching/stopping NRTI backbones, or virologic suppression with ABC/3TC versus TDF/FTC.

Background

ABC/3TC and TDF/FTC are two of the most commonly recommended nucleoside reverse transcriptase inhibitor (NRTI) backbones used to treat HIV as part of combination antiretroviral therapy (cART).

Rationale of this Study

- Earlier clinical trial data has raised concerns about the relative risks and benefits of ABC/3TC and TDF/FTC in initial combination antiretroviral therapy.
- Selecting the optimal cART program is a complex process that must balance efficacy, safety, and tolerability.
- Regimen changes burden the patient and health care system by complicating patient care, which may ultimately impact adherence.

How this Study was Conducted

- Data were analyzed from the CANOC collaboration, an interprovincial collaborative cohort of HIV-positive individuals on antiretroviral therapy in Canada.
- Eight cohorts from Ontario, Quebec, and British Columbia gave researchers the opportunity to conduct large and detailed analyses of HIV treatment outcomes.
- 1,764 participants from the CANOC collaboration were included in this analysis.

Study Results

- No significant differences were observed in time to virologic failure, switching or stopping antiretroviral agents, or virologic suppression between the use of ABC/3TC or TDF/FTC.
- Among time to regimen failure, virologic failure, switching or stopping NRTIs, or virologic suppression there was no evidence of interaction between nucleoside backbone and baseline viral load.
- ABC/3TC-based and TDF/FTC-based regimens demonstrated similar levels of effectiveness.

Implications

- These results support the use of either NRTI backbone in the initial therapy of HIV positive patients and would support continuing ABC/3TC as a “preferred” treatment option.
- Improved understanding of how tolerability, treatment simplification, and other factors drive treatment discontinuation could guide future efforts to improve regimen durability.

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