Tenofovir alafenamide (TAF): 
- NRTI agent in most guideline-recommended regimens
- Replaced tenofovir disoproxil fumarate (TDF) or included in addition to TDF
- Based on data including 48-week efficacy in treatment-naive patients with TAF vs TDF, each with elvitegravir (EVG)/cobicistat (COB)/elotreticoline (FTC) (Studies 104/111): 92% vs 90% #TAF superior to TDF at Week 144: 84% vs 80% 
- FTC/TAF (vs FTC/TDF) with other 3rd agents (Study 1089)
- Similar overall efficacy at Week 48 (94% vs 93%) and Week 96 (89% vs 89%)
- Less renal and bone toxicities 
- FTC/TAF-containing single-tablet regimens
- EVG/COB/FTC/TAF
- ripivirine/FTC/TAF
- Can be used in patients with eGFR as low as 30 mL/min

**Background**

**Methods**

**Study Design:** Switch From FTC/TDF to FTC/TAF

**Randomized, double-blind, double-dummy, active-controlled study (NCT02121795)**

**Results**

**Baseline Characteristics Subgroup 50±50 years of age**

<table>
<thead>
<tr>
<th></th>
<th>FTC/TDF</th>
<th>FTC/TAF</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median age, y (range)</td>
<td>55 (50–75)</td>
<td>54 (50–75)</td>
<td>0.11</td>
</tr>
<tr>
<td>Female, n (%)</td>
<td>17 (11)</td>
<td>18 (13)</td>
<td>0.77</td>
</tr>
<tr>
<td>Race, n (%)</td>
<td>White</td>
<td>118 (70)</td>
<td>121 (84)</td>
</tr>
<tr>
<td>Black or African descent</td>
<td>26 (17)</td>
<td>27 (18)</td>
<td>0.82</td>
</tr>
<tr>
<td>Median CD4 count, cells/mm³</td>
<td>863 (591)</td>
<td>833 (553)</td>
<td>0.18</td>
</tr>
<tr>
<td>Median LGFR, mL/min*</td>
<td>91 (92)</td>
<td>91 (92)</td>
<td>0.95</td>
</tr>
<tr>
<td>Hyper tension, n (%)</td>
<td>64 (44)</td>
<td>64 (44)</td>
<td>1.00</td>
</tr>
<tr>
<td>Diabetes, n (%)</td>
<td>9 (6)</td>
<td>11 (8)</td>
<td>0.73</td>
</tr>
<tr>
<td>Use of 3rd agent, n (%)</td>
<td>35 (23)</td>
<td>35 (23)</td>
<td>0.97</td>
</tr>
<tr>
<td>Unscheduled 3rd agent</td>
<td>85 (57)</td>
<td>89 (60)</td>
<td>0.77</td>
</tr>
</tbody>
</table>

**Efficacy at Week 48 (Snapshot) Subgroup 50±50 years of age**

- **Change in renal biomarkers** Subgroup 50±50 years of age; Week 48
  - **Overall Safety**
    - Subgroup 250 years of age; Week 48
      - All Grades, %
        - Diarrhea
          - FTC/TDF: 12 (8)
          - FTC/TAF: 10 (7)
        - Headache
          - FTC/TDF: 9 (6)
          - FTC/TAF: 9 (6)
        - Fatigue
          - FTC/TDF: 8 (5)
          - FTC/TAF: 8 (5)
        - Arthralgia
          - FTC/TDF: 7 (5)
          - FTC/TAF: 7 (5)
        - Bronchitis
          - FTC/TDF: 7 (5)
          - FTC/TAF: 6 (4)
        - Cough
          - FTC/TDF: 6 (4)
          - FTC/TAF: 6 (4)
        - Nasopharyngitis
          - FTC/TDF: 5 (3)
          - FTC/TAF: 5 (3)
        - Snus
          - FTC/TDF: 3 (2)
          - FTC/TAF: 3 (2)
    - **Change in Bone Mineral Density**
      - Subgroup 50±50 years of age; Week 48
    - **Efficacy and safety, including renal and bone safety profile, consistent with overall study population and those <50 years**
    - **FTC/TAF is an important backbone for older patients living with HIV**

**Conclusions**

- In HIV patients aged ≥ 50 years, FTC/TAF demonstrated:
  - High rates of virologic suppression
  - Improved bone and renal safety versus FTC/TDF
  - Small increases in lipids
  - No differences in total cholesterol to HDL ratio versus FTC/TDF
  - Efficacy and safety, including renal and bone safety profile, consistent with overall study population and those < 50 years

**FTC/TAF is an important backbone for older patients living with HIV**

**References**


**Disclosures**

Dr. Cala has received compensation as an investigator for multiple Gilead studies. In addition, he received research support from Merck and HIV and is a consultant/advisor for Bristol-Myers Squibb, Gilead, Janssen, Merck, Merck, and ViiV.