A Vaginal Ring Containing Dapivirine for HIV-1 PrEP

MTN-020-ASPIRE
A Vaginal Ring Containing Dapivirine for HIV-1 PrEP
MTN-020-ASPIRE Study: Background

Study Design: ASPIRE

- **Background**: Randomized, double-blind, phase 3, placebo-controlled trial of a dapivirine-containing vaginal ring changed every 4 weeks as compared to a placebo ring for HIV-1 prevention for women at multiple sites in Malawi, South Africa, Uganda and Zimbabwe.

- **Inclusion Criteria** (2,629 enrolled)
  - 18-45 years of age
  - HIV seronegative
  - Sexually active
  - Nonpregnant

- **Treatment Arms**:  
  - Dapivirine 25 mg vaginal ring, changed monthly
  - Placebo vaginal ring, changed monthly

A Vaginal Ring Containing Dapivirine for HIV-1 PrEP MTN-020-ASPIRE Study: Results

Number of New HIV Infections (All Sites)

Number of HIV Infections

Placebo ring 97

Dapivirine ring 71

P = 0.046

↓ 27%

A Vaginal Ring Containing Dapivirine for HIV-1 PrEP
MTN-020-ASPIRE Study: Results

Number of New HIV Infections (Excluding 2 Sites with Poor Retention)

A Vaginal Ring Containing Dapivirine for HIV-1 PrEP
MTN-020-ASPIRE Study: Results

Incidence Rate for New HIV Infections

A Vaginal Ring Containing Dapivirine for HIV-1 PrEP
MTN-020-ASPIRE Study: Results

Relative Reduction, by Age Group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>% Relative Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>27</td>
</tr>
<tr>
<td>Age ≤25</td>
<td>10</td>
</tr>
<tr>
<td>Age &gt;25</td>
<td>61</td>
</tr>
</tbody>
</table>

A Vaginal Ring Containing Dapivirine for HIV-1 PrEP
MTN-020-ASPIRE Study: Results

Reduction in HIV Incidence Comparing Age Groups

<table>
<thead>
<tr>
<th>Subgroup Analysis</th>
<th>HIV Protection (Reduction in Incidence Comparing Dapivirine Ring to Placebo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25 years-old</td>
<td>10%</td>
</tr>
<tr>
<td>&gt;25 years-old</td>
<td>*61%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-hoc Analysis</th>
<th>HIV Protection (Reduction in Incidence Comparing Dapivirine Ring to Placebo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-21 years-old</td>
<td>27%</td>
</tr>
<tr>
<td>21-27 years-old</td>
<td>*56%</td>
</tr>
<tr>
<td>27-45 years-old</td>
<td>*51%</td>
</tr>
</tbody>
</table>

*Improved HIV protection in older age groups correlated with increased markers of adherence

A monthly vaginal ring containing dapivirine reduced the risk of HIV-1 infection among African women, with increased efficacy in subgroups with evidence of increased adherence.

Acknowledgment

The National HIV Curriculum is an AIDS Education and Training Center (AETC) Program resource funded by the United States Health Resources and Services Administration. The project is led by the University of Washington and the AETC National Coordinating Resource Center.

The content in this slide set does not represent the official views of the U.S. Department of Health and Human Services, Health Resources & Services Administration.