RESULTS

• Patients ages 13-25 year olds were significantly less likely to achieve virologic suppression compared to older age groups. Among patients who achieved suppression, 13-25 year olds were slightly more likely to experience virologic rebound during the initial ART regimen. However, the differences were statistically significant (p=0.04).

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with CD4 cell counts >500 cells/µL.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with HIV RNA viral load ≥100,000 copies/mL.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with late presenters (>200 copies/mL).

Table 1: Selected Baseline Clinical Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>13-25 year olds</th>
<th>26-49 year olds</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>23.2 (21.5, 24.7)</td>
<td>28.0 (25.8, 30.5)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Sex</td>
<td>Male: 60.1% Female: 39.9%</td>
<td>Male: 61.6% Female: 38.4%</td>
<td>0.13</td>
</tr>
<tr>
<td>Race</td>
<td>Non-Hispanic: 48.6% Hispanic: 30.4% Other: 21.0%</td>
<td>Non-Hispanic: 48.7% Hispanic: 29.6% Other: 21.7%</td>
<td>0.32</td>
</tr>
<tr>
<td>Education</td>
<td>High school or less: 53.5%</td>
<td>High school or less: 48.3%</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Table 2: Treatment Outcomes Of Initial ART Regimen By Age Groups

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>13-25 year olds</th>
<th>26-49 year olds</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virologic Suppression</td>
<td>86.1% (95% CI 84.7, 87.5)</td>
<td>91.6% (95% CI 90.9, 92.3)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Time to virologic rebound</td>
<td>12.0 (6.1, 22.5) months</td>
<td>4.7 (2.9, 7.5) months</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

Figure 1: Geographical Distribution of OPERA Cohort

Figure 2: PR/PI-Resistant Drug Use by Age Group

DISCUSSION

• In a large US HIV population, adolescents and young adults in the OPERA cohort made up 21% of patients new to treatment, and were more likely to initiate ART compared to older patients.

• While 13-25 year olds were more likely to have proactively taken medications to reduce their viral load, they were less likely to actually take them.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with CD4 cell counts >500 cells/µL.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with HIV RNA viral load ≥100,000 copies/mL.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with late presenters (>200 copies/mL).

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with moderate presenters (>350 to ≤500 copies/mL).

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with early presenters (>500 cells/mL).

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with primary presenters (<50 cells/mL).

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with late presenters (>200 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with moderate presenters (>350 to ≤500 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with early presenters (>500 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with primary presenters (<50 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with late presenters (>200 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with moderate presenters (>350 to ≤500 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with early presenters (>500 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with primary presenters (<50 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with late presenters (>200 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with moderate presenters (>350 to ≤500 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with early presenters (>500 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with primary presenters (<50 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with late presenters (>200 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with moderate presenters (>350 to ≤500 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with early presenters (>500 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with primary presenters (<50 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with late presenters (>200 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with moderate presenters (>350 to ≤500 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with early presenters (>500 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with primary presenters (<50 cells/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with late presenters (>200 copies/mL) and trended in that direction for 13-25 year olds.

• Younger patients were more likely to achieve virologic suppression compared to patients initiating with moderate presenters (>350 to ≤500 copies/mL) and trended in that direction for 13-25 year olds.