This publication represents the views and expert opinions of an IARC Working Group on the Evaluation of Cancer-Preventive Interventions, which met remotely, 12–16 October 2020.

LYON, FRANCE - 2022

IARC HANDBOOKS OF CANCER PREVENTION
Table S1 Number of true-positive, false-positive, false-negative, and true-negative results in 1000 women with a positive hrHPV test result at screening and triaged with one of six selected scenarios; PPV, NNR (= 1/PPV), NPV, and cNPV estimated for three situations of underlying background risk of CIN3+: low risk, 5%; intermediate risk, 8%; high risk, 17%

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Triage test</th>
<th>Pre-test</th>
<th>Post-test positive</th>
<th>Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sen</td>
<td>Spec</td>
<td>Risk</td>
<td>TP</td>
</tr>
<tr>
<td>Low risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a</td>
<td>Cytology at a threshold of ASC-US+</td>
<td>0.78</td>
<td>0.75</td>
<td>0.05</td>
</tr>
<tr>
<td>1b</td>
<td>Cytology at a threshold of ASC-US+ with knowledge of HPV status</td>
<td>0.82</td>
<td>0.69</td>
<td>0.05</td>
</tr>
<tr>
<td>2</td>
<td>HPV16/18 genotyping</td>
<td>0.61</td>
<td>0.75</td>
<td>0.05</td>
</tr>
<tr>
<td>3</td>
<td>p16/Ki-67 dual staining</td>
<td>0.85</td>
<td>0.64</td>
<td>0.05</td>
</tr>
<tr>
<td>4</td>
<td>VIA</td>
<td>0.69</td>
<td>0.79</td>
<td>0.05</td>
</tr>
<tr>
<td>5</td>
<td>HPV16/18 genotyping &gt; cytology at a threshold of ASC-US+</td>
<td>0.86</td>
<td>0.68</td>
<td>0.05</td>
</tr>
<tr>
<td>6</td>
<td>HPV16/18 genotyping &gt; VIA^b</td>
<td>0.92</td>
<td>0.58</td>
<td>0.05</td>
</tr>
<tr>
<td>Intermediate risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a</td>
<td>Cytology at a threshold of ASC-US+</td>
<td>0.78</td>
<td>0.75</td>
<td>0.08</td>
</tr>
<tr>
<td>1b</td>
<td>Cytology at a threshold of ASC-US+ with knowledge of HPV status</td>
<td>0.82</td>
<td>0.69</td>
<td>0.08</td>
</tr>
<tr>
<td>2</td>
<td>HPV16/18 genotyping</td>
<td>0.61</td>
<td>0.75</td>
<td>0.08</td>
</tr>
<tr>
<td>3</td>
<td>p16/Ki-67 dual staining</td>
<td>0.85</td>
<td>0.64</td>
<td>0.08</td>
</tr>
<tr>
<td>4</td>
<td>VIA</td>
<td>0.69</td>
<td>0.79</td>
<td>0.08</td>
</tr>
<tr>
<td>5</td>
<td>HPV16/18 genotyping &gt; cytology at a threshold of ASC-US+</td>
<td>0.86</td>
<td>0.68</td>
<td>0.08</td>
</tr>
<tr>
<td>6</td>
<td>HPV16/18 genotyping &gt; VIA^b</td>
<td>0.92</td>
<td>0.58</td>
<td>0.08</td>
</tr>
</tbody>
</table>
### Table S1 (continued)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Triage test</th>
<th>Pre-test</th>
<th>Post-test positive</th>
<th>Post-test negative</th>
<th>Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sen</td>
<td>Spec</td>
<td>Risk</td>
<td>TP</td>
<td>FN</td>
</tr>
<tr>
<td><strong>High risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a</td>
<td>Cytology at a threshold of ASC-US+</td>
<td>0.78</td>
<td>0.75</td>
<td>0.17</td>
<td>132</td>
</tr>
<tr>
<td>1b</td>
<td>Cytology at a threshold of ASC-US+ with knowledge of HPV status</td>
<td>0.82</td>
<td>0.69</td>
<td>0.17</td>
<td>139</td>
</tr>
<tr>
<td>2</td>
<td>HPV16/18 genotyping</td>
<td>0.61</td>
<td>0.75</td>
<td>0.17</td>
<td>104</td>
</tr>
<tr>
<td>3</td>
<td>p16/Ki-67 dual staining</td>
<td>0.85</td>
<td>0.64</td>
<td>0.17</td>
<td>145</td>
</tr>
<tr>
<td>4</td>
<td>VIA</td>
<td>0.69</td>
<td>0.79</td>
<td>0.17</td>
<td>117</td>
</tr>
<tr>
<td>5</td>
<td>HPV16/18 genotyping &gt; cytology at a threshold of ASC-US+</td>
<td>0.86</td>
<td>0.68</td>
<td>0.17</td>
<td>146</td>
</tr>
<tr>
<td>6</td>
<td>HPV16/18 genotyping &gt; VIA$^b$</td>
<td>0.92</td>
<td>0.58</td>
<td>0.17</td>
<td>156</td>
</tr>
</tbody>
</table>

ASC-US+, atypical squamous cells of undetermined significance or worse; CIN3+, cervical intraepithelial neoplasia grade 3 or worse; cNPV, complement of NPV (= 1 − NPV = post-test risk of CIN3+ if triage-negative); FN, number of false negatives; FP, number of false positives; HPV, human papillomavirus; hrHPV, high-risk human papillomavirus; NNR, number needed to refer = number of women who must be referred for colposcopy to detect 1 case of CIN3+ (= 1/PPV); NPV, negative predictive value; PPV, positive predictive value (= post-test risk of CIN3+ if triage-positive); Sen, sensitivity of the triage strategy; Spec, specificity of the triage strategy; TN, number of true negatives; TP, number of true positives; VIA, visual inspection with acetic acid.

$^a$ The shading indicates a risk of CIN3+ > 10% if triage-positive (PPV) and < 1% if triage-negative (cNPV).

$^b$ Based on only 2 studies [unstable estimates].

Created by the Working Group.