The cobas® HPV Test

Know the details of patient risk as early as the first test

The cobas® HPV Test allows you to manage your patients with greater precision and efficiency by individually identifying the highest-risk genotypes, HPV 16 and HPV 18, while simultaneously providing pooled results for 12 other hrHPV genotypes.

Provides information important to the clinical management of women with ASC-US
• Women who were ASC-US HPV16+ were more than twice as likely to have >CIN2 than women who were ASC-US pooled hrHPV+.

Helps you uncover disease that is missed by cytology
• In the ATHENA trial nearly 1 in 7 women with normal cytology, HPV 16+ had high-grade cervical disease.2
• The professional societies prefer cytology–HPV co-testing, over Pap alone, in women 30-65 years of age.1*
• The ASCCP recommends genotyping for HPV 16 or HPV16/18.3
• The ASCCP supports immediate colposcopy for women who are HPV 16 positive or 18 positive.3

Because the devil is in the details, add the cobas® HPV Test to your practice

In cervical cancer screening

The devil is in the details

FDA approved. CE marked.

Because the devil is in the details, ask your lab about the cobas® HPV Test

Guidelines
The professional societies prefer cytology–HPV co-testing in women 30-65 years of age.*

ASCUS / ASCN / ASC-H
classifications

<table>
<thead>
<tr>
<th>Test result</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC-US HPV+</td>
<td>Rescreen with co-testing in 6 years</td>
</tr>
<tr>
<td>NILM HPV+</td>
<td>Rescreen with co-testing in 6 years*</td>
</tr>
<tr>
<td>NILM HPV+</td>
<td>HPV16 or HPV18+ genotyping*</td>
</tr>
<tr>
<td>NILM HPV+ with HPV16 or 18+</td>
<td>Immediate colposcopy</td>
</tr>
</tbody>
</table>

Provided information important to the clinical management of women with ASC-US
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Because the devil is in the details, ask your lab about the cobas® HPV Test

ACS = American Cancer Society; ASC = atypical glandular cells; ASC-HPV = American Society for Colposcopy and Cervical Pathology; \( ASC-US \) = atypical squamous cells; ASC-NILM = atypical squamous cells; NILM = normal cytology; ASC-H = atypical squamous cells; cannot rule out HSIL; ASC-US = atypical squamous cells of undetermined significance; ASC-H = atypical squamous cells, cannot rule out HSIL; AGC = atypical glandular cells; ATYP = atypical cells; MSLT-ID = Addressing THE Need for Advanced HPV Diagnostics; >ASC-US = grade 2 cervical intraepithelial neoplasia; LSIL = low-grade squamous intraepithelial lesion; ASC-US = atypical squamous cells of undetermined significance; >ASC-US = LSIL, ASC-H, HSIL, SCC, AGC, and AGC, favor neoplastic; CIN2 = grade 2 cervical intraepithelial neoplasia; CIN3 = grade 3 cervical intraepithelial neoplasia; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; ASCN = atypical squamous cells; NILM = negative for intraepithelial lesion or malignancy.

*Serial cytology remains an option for these women.

The devil is in the details
With the cobas® HPV Test, just know who is at highest risk and who can be spared unnecessary treatment.
Cytology

Important for knowing cervical cancer risk

Pap cytology has reduced cervical cancer mortality through regular screening programs.¹

Although Pap cytology has been a cornerstone of detecting disease and reducing mortality, cervical cancer remains a serious public health matter.² Pap cytology does not uncover all disease.³⁴

Normal cytology does not always mean cancer free

Invasive cervical cancer occurs in women with normal Pap cytology.⁵

Percentage of invasive cervical cancer that occurred in women with normal Paps

<table>
<thead>
<tr>
<th>Healthcare plan</th>
<th>N</th>
<th>Inv Cervical Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser Permanente</td>
<td>833</td>
<td>24%</td>
</tr>
<tr>
<td>Swedish healthcare system</td>
<td>1230</td>
<td>26%</td>
</tr>
</tbody>
</table>
The cobas® HPV Test
An important addition to your practice

The cobas® HPV Test allows you to manage your patients with greater precision and efficiency.

The cobas® HPV Test lets you know who is at highest risk of cervical cancer and who requires less intensive follow-up. This important information adds value to annual exams by helping you to focus on what is most critical to you and your patients.

The clinical value of further defining your patients’ risk of cervical cancer
• More informed and personalized clinical care
• More productive and meaningful annual exams
• Avoidance of patient anxiety
• Potentially extended screening intervals
• Improved practice workflow

Reimbursement assistance
For the latest reimbursement information on the cobas® HPV Test, contact the Roche Diagnostics reimbursement hotline at 1-866-805-9155.
High risk HPV testing

For additional predictive power

Adding an HPV test to Pap cytology helps identify women at high risk of cervical cancer.\(^1\,^3\)

Almost all cervical cancer is attributable to HPV, so knowing a woman’s HPV status is important to ascertaining her risk of cervical cancer and determining clinical management.\(^1\) For example, a 5-year study of 330,000 women found that it was safe to extend the screening interval to 3 years for women who were NILM HPV−.\(^1\)

High-risk HPV testing reveals even more about patient risk

By providing results on only the most oncogenic forms of HPV, pooled hrHPV tests help further illuminate patient risk and refine clinical decision making.

Guidelines

- Organizations worldwide recommend using both cytology and HPV tests to determine patient risk of cervical cancer.\(^6\,^12\)
- ASCCP, ASCP and ACS recommend cytology and HPV co-testing as a preferred option for women 30–65 years of age, over cytology alone.\(^16\) Serial cytology also remains an option for these women.

The cobas® HPV Test identifies cancer risk in women with NILM cytology

- Women who were NILM HPV 16+ were over twice as likely to have ≥CIN2 than NILM women who were hrHPV+.\(^2\)
- The risk of ≥CIN2 in HPV 16+ women with NILM cytology was comparable to the risk in hrHPV+ women with ASC-US cytology.\(^2\)

![Absolute risk of ≥CIN2 stratified by hrHPV status in the ATHENA NILM population](image)

![Comparative risk of high-grade cervical disease in women based on Pap and HPV test results](image)

*Absolute risk measurements are estimates based on raw study data.*
The limits of pooled hrHPV testing

Within the hrHPV genotypes, some types incur higher risks of precancer than others. Therefore, when determining the course of clinical management for women who are NILM hrHPV+, it is important to have a test that provides individual results on the highest-risk HPV genotypes.

The cobas® HPV Test

Uncover disease that is missed by cytology

The cobas® HPV Test provides more information about cancer risk in women who are NILM than pooled hrHPV testing does.

The ATHENA trial: analysis of women with normal cytology

Objectives

To compare the risk of ≥CIN2 among women who are NILM and ≥20 years of age who are HPV 16+ and/or HPV 18+ with women who are positive for the 12 other pooled hrHPV genotypes with the cobas® HPV Test.

Results

Approximately 1 in 7 women who were NILM HPV 16+ had high-grade cervical disease that was missed by cytology.

Guidelines

- For women who are 30 years of age or older with NILM cytology and hrHPV+, the ASCCP, ASCP, and ACS support genotyping for HPV 16 or HPV 16/18. These societies support immediate colposcopy for women who are HPV 16 positive or 18 positive.

- The cobas® HPV Test enables adherence to the guidelines by identifying those women at highest risk who were not identified by cytology.

ACOG = American Congress of Obstetricians and Gynecologists; ACS = American Cancer Society; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; NILM = negative for intraepithelial lesion or malignancy.
HPV 16 and HPV 18

Details that further define risk

Women with HPV 16 and HPV 18 genotypes are at highest risk of cervical cancer.1

Focus on the few at highest risk

HPV 16 and HPV 18 genotypes are responsible for approximately two-thirds of cervical cancer.1 In fact, women who are HPV 16+ and/or HPV 18+ are at increased risk of CIN even if they have normal baseline and repeat cytologies.2

HPV 18 was found in 57% of cases of adenocarcinoma of the cervix.3 Atypical glandular cells, the precursors to adenocarcinoma of the cervix, are difficult to detect with Pap.

HPV 18 causes 10% to 12% of cervical cancer1
HPV 18 causes 50% to 60% of cervical cancer1

Guidelines

For women who are 30 years of age or older with NILM cytology and hrHPV+, the ASCCP ACS and ASCP all recommend either repeat co-testing or genotyping for HPV16 or HPV16/18. The ASCCP supports immediate colposcopy for women who are HPV16 positive or HPV16/18 positive.4

Because the devil is in the details, order the cobas® HPV Test to know the risk in women with ASC-US

The cobas® HPV Test identifies women with ASC-US at highest risk of cancer

• The absolute risk of ≥CIN2 was 31.5% among women who were HPV 16+.2
• Pooled hrHPV+ women were at very low risk of ≥CIN2.2

The cobas® HPV Test helps you follow the guidelines by providing pooled hrHPV results.

• The cobas® HPV Test also provides individual HPV 16 and HPV 18 results to help you identify those women at highest risk who may need more intensive postcolposcopic follow-up.

Absolute risk of ≥CIN2 stratified by hrHPV status in the ATHENA ASC-US population1

<table>
<thead>
<tr>
<th>Cytology result</th>
<th>14 pooled cobas® result</th>
<th>12 other hrHPV+</th>
<th>HPV 16+</th>
<th>HPV 18+</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC-US</td>
<td>5.1</td>
<td>0.8</td>
<td>8.6</td>
<td>4.3</td>
</tr>
<tr>
<td>hrHPV−</td>
<td>14.0</td>
<td>31.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hrHPV+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Guidelines

• The ASCCP supports that women with ASC-US who are hrHPV+ be referred for colposcopy.4

ACS — American Cancer Society; ASCCP — American Society for Colposcopy and Cervical Pathology; ASCP — American Society for Clinical Pathology; CIN — cervical intraepithelial neoplasia; CIN3 — grade 3 cervical intraepithelial neoplasia; HPV — human papillomavirus; hrHPV — high-risk human papillomavirus; NILM — negative for intraepithelial lesion or malignancy.
The cobas® HPV Test

Know which women with ASC-US are at highest risk

The cobas® HPV Test was clinically validated against the current standard of testing in ASC-US triage and improved on it by providing individual results for HPV 16 and HPV 18.

**Objectives**

To clinically validate the performance of the cobas® HPV Test for screening women with ASC-US cytology to determine the need for colposcopy

To compare risks of ≥CIN2 between women with a positive and those with a negative cobas® HPV Test result

**Results**

The cobas® HPV Test demonstrated performance comparable to the current standard of pooled hrHPV testing (14 genotypes) for the detection of ≥CIN2 and ≥CIN3.1

4% of women in ATHENA had ASC-US cytology; 3% of women had >ASC-US cytology.1,2

In an independent study of 20,000 women with normal cytology, ≥CIN3 occurred most often in HPV 16+ or HPV 18+ women

- HPV 16+ or HPV 18+ women were more likely to have ≥CIN3 over a 10-year period than women who were positive for other pooled hrHPV genotypes.5
- For women who were HPV 16+ at baseline, the incidence rose sharply during the first year of the study.3
- For HPV 18+ women, the incidence of ≥CIN3 increased dramatically from around 2 years after baseline.5

**The ATHENA trial: women with ASC-US analysis**

**Women who were ASC-US HPV 16+ were more than twice as likely to have ≥CIN2 than ASC-US women who were hrHPV+.2**

Because the devil is in the details, test for HPV 16 and HPV 18 to reveal highest risk

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2. Data on file, Roche Molecular Systems, Inc.
Evidence-based cervical cancer screening

The cobas® HPV Test was clinically validated in ATHENA, the first screening trial for registration that evaluated simultaneous real-time genotyping of 12 pooled hrHPV genotypes plus HPV 16 and HPV 18 individually. The ATHENA trial evaluated the performance of the cobas® HPV Test in multiple clinical situations, including ASC-US triage and co-testing.¹

ASC-US = atypical squamous cells of undetermined significance; ATHENA = Addressing THE Need for Advanced HPV Diagnostics; CIN2 = grade 2 cervical intraepithelial neoplasia; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; NILM = negative for intraepithelial lesion or malignancy.

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The cobas® HPV Test was clinically validated in ATHENA, the first screening trial for registration that evaluated simultaneous real-time genotyping of 12 pooled hrHPV genotypes plus HPV 16 and HPV 18 individually. The ATHENA trial evaluated the performance of the cobas® HPV Test in multiple clinical situations, including ASC-US triage and co-testing.

ASC-US = atypical squamous cells of undetermined significance; ATHENA = Addressing THE Need for Advanced HPV Diagnostics; CIN2 = grade 2 cervical intraepithelial neoplasia; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; NILM = negative for intraepithelial lesion or malignancy.

ATHENA: powered to change the standard of testing

ATHENA is a multicenter, prospective trial enrolling over 47,000 women ≥21 years of age undergoing routine cervical cancer screening.

STUDY VISIT 1:
Cytology and HPV testing were performed on all women.

STUDY VISIT 2:
All women with ≥ASC-US cytology or hrHPV+ test results and a random subset of women ≥25 years of age who were NILM hrHPV- underwent colposcopy and biopsy.

3-YEAR LONGITUDINAL FOLLOW-UP:
Women without a histological diagnosis of ≥CIN2 have annual follow-up visits for the next 3 years, at which those with abnormal cytology underwent colposcopy and biopsy; those with a histological diagnosis of ≥CIN2 exit the study.

Women with a histological diagnosis of ≥CIN2 met the endpoint and exited the study.

Exit colposcopy was offered to all women.

Because the devil is in the details, order the evidence-based cobas® HPV Test

FDA approved. CE marked.

The cobas® HPV Test
Know the risk of cervical cancer

The cobas® HPV Test is the only FDA-approved and CE-marked assay that simultaneously provides pooled results on 12 high-risk genotypes and individual results on the highest-risk genotypes, HPV 16 and HPV 18.

The cobas® HPV Test: 1 sample, 1 test, 3 results for confident risk stratification:

The cobas® HPV Test detects 14 high-risk genotypes with the ability to provide specific genotype results for HPV16 and HPV18. Significantly enhanced patient risk stratification allows you to:

• focus on the few patients who need aggressive treatment
• reassure the vast majority of women that they are at very low risk
Women who were ASC-US HPV 16+ were more than twice as likely to have ≥CIN2 than ASC-US women who were hrHPV+.³

In an independent study of 20,000 women with normal cytology, ≥CIN3 occurred most often in HPV 16+ or HPV 18+ women

- HPV 16+ or HPV 18+ women were more likely to have ≥CIN3 over a 10-year period than women who were positive for other pooled hrHPV genotypes.⁵
- For women who were HPV 16+ at baseline, the incidence rose sharply during the first year of the study.³
- For HPV 18+ women, the incidence of ≥CIN3 increased dramatically from around 2 years after baseline.⁵

The cobas® HPV Test
Know which women with ASC-US are at highest risk

The cobas® HPV Test was clinically validated against the current standard of testing in ASC-US triage and improved on it by providing individual results for HPV 16 and HPV 18.

Objectives
To clinically validate the performance of the cobas® HPV Test for screening women with ASC-US cytology to determine the need for colposcopy¹
To compare risks of ≥CIN2 between women with a positive and those with a negative cobas® HPV Test result¹

Results
The cobas® HPV Test demonstrated performance comparable to the current standard of pooled hrHPV testing (14 genotypes) for the detection of ≥CIN2 and ≥CIN3.¹
4% of women in ATHENA had ASC-US cytology; 3% of women had >ASC-US cytology.¹,²

Women who were ASC-US HPV 16+ were more than twice as likely to have ≥CIN2 than ASC-US women who were hrHPV+.³

The ATHENA trial: women with ASC-US analysis

The pooled hrHPV genotypes were as follows: HPV 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, and 68.

Because the devil is in the details, test for HPV 16 and HPV 18 to reveal highest risk
HPV 16 and HPV 18

Details that further define risk

Women with HPV 16 and HPV 18 genotypes are at highest risk of cervical cancer.1

Focus on the few at highest risk

HPV 16 and HPV 18 genotypes are responsible for approximately two-thirds of cervical cancer.1 In fact, women who are HPV 16+ and/or HPV 18+ are at increased risk of CIN even if they have normal baseline and repeat cytologies.2

HPV 18 was found in 57% of cases of adenocarcinoma of the cervix.2

Atypical glandular cells, the precursors to adenocarcinoma of the cervix, are difficult to detect with Pap.

HPV 18 causes 10% to 12% of cervical cancer.1

HPV 18 causes 50% to 60% of cervical cancer.1

ABSOLUTE RISK (%) ≥CIN2

ASC-US

hrHPV−

16 pooled cobas® result

hrHPV+

12 other hrHPV+

HPV 16+

HPV 18+

40
30
20
10
0

5.1

0.8

14.0

8.6

31.5

4.3

The cobas® HPV Test identifies women with ASC-US at highest risk of cancer

• The absolute risk of ≥CIN2 was 31.5% among women who were HPV 16+.3

• Pooled hrHPV− women were at very low risk of ≥CIN2.3

Guidelines

• The ASCCP supports that women with ASC-US who are hrHPV+ be referred for colposcopy.4

• The cobas® HPV Test helps you follow the guidelines by providing pooled hrHPV results.

• The cobas® HPV Test also provides individual HPV 16 and HPV 18 results to help you identify those women at highest risk who may need more intensive postcolposcopic follow-up.

The devil is in the details, order the cobas® HPV Test to know the risk in women with ASC-US

Because the devil is in the details, order the cobas® HPV Test to know the risk in women with ASC-US

ACS = American Cancer Society; ASCCP = American Society for Colposcopy and Cervical Pathology; ASCP = American Society for Clinical Pathology; CIN = cervical intraepithelial neoplasia; CIN3 = grade 3 cervical intraepithelial neoplasia; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; NILM = negative for intraepithelial lesion or malignancy.

Other objectives were to compare the risk of high-grade cervical disease that was missed by cytology.

**The cobas® HPV Test**

**Uncover disease that is missed by cytology**

*The cobas® HPV Test provides more information about cancer risk in women who are NILM than pooled hrHPV testing does.*

**The ATHENA trial: analysis of women with normal cytology**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>To compare the risk of ≥CIN2 among women who are NILM and ≥30 years of age who are HPV 16+ and/or HPV 18+ with women who are positive for the 12 other pooled hrHPV genotypes with the cobas® HPV Test*</td>
<td>Approximately 1 in 7 women who were NILM HPV 16+ had high-grade cervical disease that was missed by cytology.†</td>
</tr>
</tbody>
</table>

**Guidelines**

- For women who are 30 years of age or older with NILM cytology and hrHPV+, the ASCCP, ASCP and ACS support genotyping for HPV 16 or HPV 16/18. These societies support immediate colposcopy for women who are HPV 16 positive or 18 positive.‡

- The cobas® HPV Test enables adherence to the guidelines by identifying those women at highest risk who were not identified by cytology.

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*Other objectives were to compare the risk of ≥CIN2 in women who had a positive cobas® HPV Test with the risk in women who had a negative cobas® HPV Test, and to compare the risk of ≥CIN2 in women who were HPV 16+ or HPV 18+ with the risk in women who had a negative cobas® HPV Test.*

†Serial cytology remains an option for these women.

‡The cobas® HPV Test is indicated for the detection of human papillomavirus (HPV) DNA to aid in the management of women aged 30 years and older with negative for intraepithelial lesion or malignancy (NILM) cytology who were found to be positive for hrHPV 16+ and/or hrHPV 18+ by a licensed laboratory using an approved HPV DNA assay. The cobas® HPV Test does not replace visual inspection with acetic acid (VIA) or visual inspection with acetic acid and cervicography (VIA+). The cobas® HPV Test is indicated for the detection of 12 other high-risk hrHPV genotypes (16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 68) which are recognized by the American Society for Colposcopy and Cervical Pathology (ASCCP) as infection(s) with high-risk HPV genotypes that have the potential to progress to cervical intraepithelial neoplasia (CIN) 2 or worse. The cobas® HPV Test is not a substitute for other cervical cancer screening tests such as cervical cytology or visual inspection with acetic acid (VIA/VIA+). The cobas® HPV Test is also indicated for the identification of women with a negative cervical cytology (NILM) who have a positive test result for a high-risk HPV genotype. The cobas® HPV Test is intended to aid in the selection of appropriate management for the NILM patient. The cobas® HPV Test is not intended to be used as a triage test or as a definitive test for cervical cancer.
High risk HPV testing

For additional predictive power

Adding an HPV test to Pap cytology helps identify women at high risk of cervical cancer.¹,²

Almost all cervical cancer is attributable to HPV, so knowing a woman’s HPV status is important to ascertaining her risk of cervical cancer and determining clinical management.³,⁴ For example, a 5-year study of 330,000 women found that it was safe to extend the screening interval to 3 years for women who were NILM HPV−.³

Guidelines

• Organizations worldwide recommend using both cytology and HPV tests to determine patient risk of cervical cancer.⁶-¹²
• ASCCP, ASCP and ACS recommend cytology and HPV co-testing as a preferred option for women 30-65 years of age, over cytology alone.¹⁶ Serial cytology also remains an option for these women.

The cobas® HPV Test identifies cancer risk in women with NILM cytology

• Women who were NILM HPV 16+ were over twice as likely to have ≥CIN2 than NILM women who were hrHPV+.²
• The risk of ≥CIN2 in HPV 16+ women with NILM cytology was comparable to the risk in hrHPV+ women with ASC-US cytology.²

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**Absolute risk of ≥CIN2 stratified by hrHPV status in the ATHENA NILM population²**

<table>
<thead>
<tr>
<th>Cytology result</th>
<th>Estimated Absolute (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NILM</td>
<td>1.2</td>
</tr>
<tr>
<td>hrHPV−</td>
<td>0.8</td>
</tr>
<tr>
<td>hrHPV+</td>
<td>6.1</td>
</tr>
<tr>
<td>12 hrHPV+</td>
<td>4.6</td>
</tr>
<tr>
<td>HPV 16+</td>
<td>13.6</td>
</tr>
<tr>
<td>HPV 18+</td>
<td>7.0</td>
</tr>
</tbody>
</table>

**Stratified cobas® positive result**

1.2 NLM
0.8 hrHPV−
6.1 hrHPV+
4.6 12 hrHPV+
13.6 HPV 16+
7.0 HPV 18+

*Absolute risk measurements are estimates based on raw study data.

**Comparative risk of high-grade cervical disease in women based on Pap and HPV test results**²,³

<table>
<thead>
<tr>
<th>Pap result</th>
<th>14 hrHPV+ ≥21 years</th>
<th>HPV 16+ ≥30 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC-US Pap</td>
<td>14.0</td>
<td>13.6</td>
</tr>
<tr>
<td>Normal Pap</td>
<td>0.0</td>
<td>0.0</td>
</tr>
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The clinical value of further defining your patients' risk of cervical cancer
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- More productive and meaningful annual exams
- Avoidance of patient anxiety
- Potentially extended screening intervals
- Improved practice workflow

Reimbursement assistance
For the latest reimbursement information on the cobas® HPV Test, contact the Roche Diagnostics reimbursement hotline at 1-866-805-9155.

ACS = American Cancer Society; ASCP = American Society for Clinical Pathology; ASCC = American Society for Colposcopy and Cervical Pathology; ASC-US = atypical squamous cells of undetermined significance; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; NILM = negative for intraepithelial lesion or malignancy.


Disease progression during the testing interval
False positives may create anxiety and confusion.
False negatives may hide the presence of CIN.
Unnecessary follow-up diagnostic procedures

Pap is important, but more details are needed to further define patient risk

ACS = American Cancer Society; ASCP = American Society for Clinical Pathology; ASCC = American Society for Colposcopy and Cervical Pathology; ASC-US = atypical squamous cells of undetermined significance; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; NILM = negative for intraepithelial lesion or malignancy.

The cobas® HPV Test

Know the details of patient risk as early as the first test

The cobas® HPV Test allows you to manage your patients with greater precision and efficiency by individually identifying the highest-risk genotypes, HPV 16 and HPV 18, while simultaneously providing pooled results for 12 other hrHPV genotypes.

Provides information important to the clinical management of women with ASC-US

- Women who were ASC-US HPV+ were more than twice as likely to have >CINI than women who were ASC-US pooled hrHPV+.

Helps you uncover disease that is missed by cytology

- In the ATHENA trial nearly 1 in 7 women with normal cytology, HPV 16+ had high-grade cervical disease.*
- The professional societies prefer cytology–HPV co-testing, over Pap alone, in women 30-65 years of age.**
- The ASCCP recommends genotyping for HPV 16 or HPV16/18.*
- The ASCCP supports immediate colposcopy for women who are HPV 16 positive or 18 positive.†

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Because the devil is in the details, add the cobas® HPV Test to your practice.
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The cobas® HPV Test
Know the details of patient risk as early as the first test

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Provides information important to the clinical management of women with ASC-US

- Women who were ASC-US HPV+ were more than twice as likely to have >CIN2 that women who were ASC-US pooled hrHPV+.

Helps you uncover disease that is missed by cytology

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- The professional societies prefer cytology–HPV co-testing, over PAP alone, in women 30-65 years of age.2
- The ASCCP recommends genotyping for HPV 16 or HPV16/18.*
- The ASCCP supports immediate colposcopy for women who are HPV 16 positive or 18 positive.3

Because the devil is in the details, ask your lab about the cobas® HPV Test

The devil is in the details

In cervical cancer screening

Provides information important to the clinical management of women with ASC-US

<table>
<thead>
<tr>
<th>Test result</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC-US hrHPV–</td>
<td>Rescreen with co-testing in 5 years1</td>
</tr>
<tr>
<td>ASC-US hrHPV+</td>
<td>Colposcopy1</td>
</tr>
<tr>
<td>NILM hrHPV–</td>
<td>Rescreen with co-testing in 5 years1</td>
</tr>
<tr>
<td>NILM hrHPV+</td>
<td>HPV16 or HPV16/18 genotyping1 or repeat co-test in 1 year</td>
</tr>
<tr>
<td>NILM HPV 16 or 16/18+</td>
<td>Immediate colposcopy1</td>
</tr>
</tbody>
</table>

AGC = atypical glandular cells; ASC-US = atypical squamous cells of undetermined significance; ASC-H = atypical squamous cells, cannot rule out HSIL; ASC-US = atypical squamous cells of undetermined significance; CIN2 = grade 2 cervical intraepithelial neoplasia; CIN3 = grade 3 cervical intraepithelial neoplasia; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; NILM = negative for intraepithelial lesion or malignancy; LSIL = low-grade squamous intraepithelial lesion; SCC = squamous cell carcinoma.

*Repeat co-testing at one year remains an option for these women.
Relevant medical history
- Last Pap test 5 years ago, NILM
- No history of cervical disease

Current exam
- Pap test: NILM
- **cobas** HPV Test:
  - 12 other pooled hrHPV–
  - HPV 16+
  - HPV 18–

Risk report no. 1
NILM HPV 16+

How would you manage this patient?

What is this patient’s risk of ≥CIN2?
What is the best course of management?

CIN2 = grade 2 cervical intraepithelial neoplasia; G1P1 = one pregnancy, one delivery; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; NILM = negative for intraepithelial lesion or malignancy.
The details about NILM risk

There is an increased risk of cervical cancer in women with NILM cytology who are HPV 16+ and/or HPV 18+.

Approximately 1 in 10 women who were NILM HPV 16+ and/or HPV 18+ had high-grade cervical disease that was missed by cytology.¹

The risk of ≥CIN2 in women ≥30 years of age who were NILM HPV 16+ and/or HPV 18+ was comparable to the risk in women ≥21 years of age with ASC-US who were hrHPV+.¹

Guidelines

- For women who are 30 years of age or older with NILM cytology and hrHPV+, the ASCCP, ASCP and ACS support genotyping for HPV 16 or HPV 16/18.¹ These societies support immediate colposcopy for women who are HPV 16 positive or 18 positive.²

- The cobas® HPV Test enables adherence to the guidelines by identifying those women at highest risk who were not identified by cytology.

FDAs approved
CE marked

Because the devil is in the details, ask for the cobas® HPV Test

ACS = American Cancer Society; ASCCP = American Society for Colposcopy and Cervical Pathology; ASCP = American Society for Clinical Pathology; ASC-US = atypical squamous cells of undetermined significance; ATHENA = Addressing THE Need for Advanced HPV Diagnostics; CIN2 = grade 2 cervical intraepithelial neoplasia; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus; NILM = negative for intraepithelial lesion or malignancy.


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Roche Molecular Diagnostics, 4300 Hacienda Drive, Pleasanton, CA 94588 USA. http://molecular.roche.com 06528295001B
How would you manage this patient?

What is this patient's risk of ≥CIN2?

What is the best course of management?

ASC-US = atypical squamous cells of undetermined significance; CIN2 = grade 2 cervical intraepithelial neoplasia; G0 = never pregnant; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus.

Relevant medical history

- ASC-US Pap and reflex hrHPV+ 1 year ago
- Colposcopy failed to reveal any lesions

Current exam

- Pap test: ASC-US
- Cobas® HPV Test:
  - 12 other pooled hrHPV-
  - HPV 16+
  - HPV 18-
- Colposcopy: no lesions detected

ASC-US HPV 16+
The details about ASC-US risk

The highest risk of cervical cancer is in women with ASC-US who are HPV 16+ and/or HPV 18+.

ATHENA is a multicenter, prospective study evaluating the performance of the cobas® HPV Test in multiple clinical situations, including ASC-US triage and co-testing. ATHENA is the first screening trial for registration that evaluated simultaneous real-time genotyping of 12 pooled hrHPV genotypes plus HPV 16 and HPV 18 individually.

**Guidelines**

- The ASCCP supports that women with ASC-US who are hrHPV+ be referred for colposcopy.²
- The cobas® HPV Test helps you follow the guidelines by providing pooled hrHPV results.
- The cobas® HPV Test also provides individual HPV 16 and HPV 18 results to help you identify those women at highest risk who may need more intensive postcolposcopic follow-up.

**FDA approved CE marked**

Because the devil is in the details, ask for the cobas® HPV Test

ACS = American Cancer Society; ASCP = American Society for Clinical Pathology; ASCCP = American Society for Colposcopy and Cervical Pathology; ASC-US = atypical squamous cells of undetermined significance; ATHENA = Addressing THE Need for Advanced HPV Diagnostics; CIN2 = grade 2 cervical intraepithelial neoplasia; HPV = human papillomavirus; hrHPV = high-risk human papillomavirus.


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The professional societies prefer cytology–HPV co-testing every five years in women 30–65 years of age.

**ASCCP / ASCP / ACS guidelines**

<table>
<thead>
<tr>
<th>Test result</th>
<th>Management</th>
</tr>
</thead>
<tbody>
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*Serial cytology remains an option for these women.*

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