

## NEW RESEARCH

### Contributions of liquid-based (Papanicolaou) cytology and human papillomavirus testing in cotesting for detection of cervical cancer and precancer in the United States

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## Co-testing with Pap and HPV together identifies more cases of cancer and precancer than either test alone<sup>1</sup>

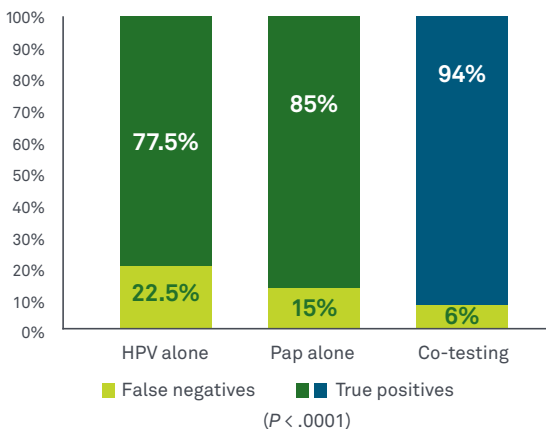
A recent Quest Diagnostics Health Trends™ retrospective, longitudinal study confirms the value of co-testing in women ages 30 to 65

**94%** of cancers were identified with co-testing <12 months to diagnosis<sup>1</sup>

**99.7%** of precancers were identified with co-testing <12 months to diagnosis<sup>1</sup>

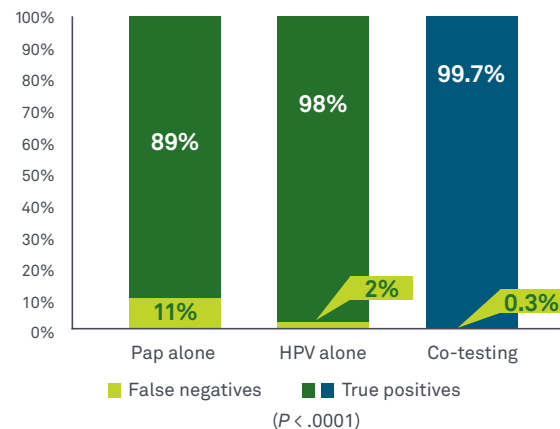
### 22.5% of cancers would not have been identified with HPV alone<sup>1</sup>

Data <12 months of cancer diagnosis



### 11% of precancers would not have been identified with Pap alone<sup>1</sup>

Data <12 months of precancer diagnosis



## Cancer outcomes over the entire study period (9 years)<sup>1</sup>

**HPV alone**

54% more women would not have been identified with cancer with HPV alone versus co-testing

**PAP alone**

50% more women would not have been identified with cancer with Pap alone versus co-testing

- Adenocarcinoma (ADC) is on the rise.<sup>2</sup> HPV alone and Pap alone failed to identify more than twice as many women diagnosed with ADC as co-testing
  - Co-testing identified 101 more cases of ADC than HPV alone, and 108 more cases versus Pap alone

Visit [WhyCotesting.com](http://WhyCotesting.com) to review the full study



## About the Quest Diagnostics Health Trends™ study

Retrospective, longitudinal analysis of women ages 30 to 65 who received co-testing with Pap and HPV together, and at least 1 biopsy prior to a diagnosis of cervical cancer or precancer (CIN3/AIS)<sup>a</sup>.

- **Co-testing identified more cases of cancer and pre-cancer than either test alone<sup>1</sup>**
- This study:
  - Is inclusive of a highly heterogeneous female population
  - Is representative of the opportunistic cervical cancer screening experience realized by most women in the US

**13 million**  
women ages 30 to 65

**19 million**  
co-testing data points

**625,000**  
co-tests followed by at least 1 cervical biopsy

## Now more than ever, co-testing makes a difference

- Screening intervals have increased over time
- Depending on the patient's age and the guidelines, intervals include<sup>3,4</sup>:

**Pap alone** every 3 years    **Co-testing** every 5 years    **OR**    **HPV alone** testing every 3 or 5 years

- In most cases in the US, cervical cancer screening is opportunistic rather than well-organized<sup>1,5</sup>



Guidelines continue to support co-testing in women ages 30–65<sup>3,4</sup>



Quest Health Trends™ data is relevant to the development of cervical cancer screening guidelines and pertinent to your day-to-day patient care<sup>1</sup>

## Ordering cervical cancer screening is efficient using one-click Smart Codes

Test code	Test name
<b>91384</b>	Image-Guided Pap with Age-Based Screening Protocols
<b>91385</b>	Image-Guided Pap with Age-Based Screening with CT/NG <sup>b</sup>
<b>91386</b>	Image-Guided Pap with Age-Based Screening with CT/NG, <i>Trichomonas</i> <sup>c</sup>

Both imaged and non-imaged Pap tests are acceptable under the American College of Obstetricians and Gynecologists (ACOG) recommendations. Non-imaged Paps, as well as additional testing recommended by ACOG, are available at Quest Diagnostics, and may be ordered individually. Go to [www.QuestDiagnostics.com/TestCenter](http://www.QuestDiagnostics.com/TestCenter) for our full test menu.

Ensure your female patients between the ages of 30 and 65 receive the best cervical cancer screening protection possible with **co-testing**



Visit **WhyCotesting.com** to review the Quest Diagnostics Health Trends™ study



<sup>a</sup> CIN3 = cervical intraepithelial neoplasia 3; AIS = adenocarcinoma in situ

<sup>b</sup> CT/NG: *Chlamydia trachomatis*/*Neisseria gonorrhoeae*

<sup>c</sup> CT/NG/Trich: *Chlamydia trachomatis*/*Neisseria gonorrhoeae*/*Trichomonas vaginalis*. Panel components can be ordered separately if not using Smart Codes. *Chlamydia/Neisseria gonorrhoeae* RNA, TMA, Urogenital (11363), *Trichomonas vaginalis* RNA, Qualitative, TMA, Pap Vial (90521)

### References

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2. Adegoke O, Kulasingam S, Virnig B. Cervical cancer trends in the United States: a 35-year population-based analysis. *J Woman's Health (Larchmt)*. 2012;21(10):1031-1037. doi:10.1089/jwh.2011.3385
3. US Preventive Services Task Force. Final recommendation statement. Cervical cancer: screening. Updated August 2018. Accessed July, 2020. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/cervical-cancer-screening2>
4. American College of Obstetricians and Gynecologists. Practice advisory: cervical cancer screening (update). Updated November 8, 2019. Accessed July, 2020. <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2018/08/cervical-cancer-screening-update>
5. Schiffman M, Kinney WK, Cheung LC, et al. Relative performance of HPV and cytology components of cotesting in cervical screening. *J Natl Cancer Inst*. 2018;110(5):501-508. doi:10.1093/jnci/djx225

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