

## [Sample Letter of Medical Necessity: HPV Genotyping]

<Date>

ATTN: <Medical Director/ Physician Name>, MD  
<Institution/Insurance Company>  
<Street Address>  
<City>, <State> <Zip>

RE: <Patient Name>  
DOB: <MM/DD/YYYY>  
Member ID: <Insurance ID Number>  
Group #: <Enter Group #>

Dear Doctor <Medical Director/ Physician Name>:

I am writing this letter on behalf of my patient, <Patient Name>, to request coverage for the HPV genotype testing that was performed at my request. Initial screening for high-risk HPV (hrHPV) returned a result of "Detected." To identify whether one or more of the most oncogenic types of HPV were present, HPV genotype testing for types 16 and 18 (or types 16 and 18/45) was performed. This letter describes the necessity for the HPV genotype test in light of my patient's medical history. The additional information gained from the results of the genotype test will be used to guide appropriate medical care for my patient.

The <test name> test was performed for my patient. I have determined that this testing is medically necessary because of the following aspects of this patient's history:

<Patient Name> received routine cervical cancer screening, including HPV screening, as part of their office visit.

1. The patient's HPV test result as part of the screening was positive ("Detected"), and thus HPV genotyping was included, at my request, to understand whether the HPV infection includes one or more of the HPV variants that are associated with a high risk of developing cervical cancer. This information is essential for determining next steps for patient treatment and is a critical part of managing this patient's cervical health.
2. The ICD-10 code <ICD-10 Code> was already included with the request for HPV screening.
3. HPV genotyping was also included (<ICD-10 Code>) in order to rule out or confirm the presence of HPV variants that confer high risk for cervical cancer, but was rejected or deemed by health plan policy as not medically necessary.

### ***Rationale for Testing***

Cervical cancer is the second leading cause of cancer deaths in women ages 20 to 39 years. An estimated 13,800 cases of invasive cervical cancer and 4,290 deaths have occurred in the US in 2020.<sup>1,2</sup> Over 99% of cervical cancer cases are caused by HPV infection, which is acquired through sexual intercourse.<sup>3-5</sup> Of the more than 100 types of HPV, at least 14 genotypes have been associated with oncogenic risk and defined as high-risk HPV (hrHPV).<sup>6</sup> In particular, the HPV 16 and 18 genotypes account for about 70% of cervical squamous cell carcinomas and the HPV 16, 18, and 45 genotypes together account for 94% of cervical adenocarcinomas.<sup>4</sup>

Screening is important in lowering the incidence of cervical cancer. Cervical cancer had previously been a leading cause of cancer death in women in the US.<sup>7,8</sup> The death rate has decreased by more than half since the mid-1970s, largely due to the use of the Papanicolaou (Pap) cytological test.<sup>1,2</sup> The sensitivity of testing for high-grade neoplasia with the Pap test alone ranges from 50% to 85%; co-testing for hrHPV along with cytology (Pap) raises sensitivity to nearly 100%.<sup>5</sup>

Detection of HPV genotypes has resulted in improved sensitivity compared to cytology alone to detect precancers and has proven to be a reliable predictor of future risk for cervical precancer and cancer.<sup>9</sup> A systematic review showed that detection of the HPV 16 genotype indicates a 15%-35% risk, regardless of cytology result, for high-grade cervical intraepithelial neoplasia (CIN grade 3 or higher [CIN 3+]).<sup>10</sup> Even with normal cytology, detection of HPV 16 carries an 8%-25% risk for CIN 3+.<sup>10</sup> In women with any cytologic abnormality, the CIN 3+ risk was 57.8% for HPV 16 and 40.2% for HPV 18; the CIN 3+ risk for other hrHPV genotypes was 31.4%.<sup>11</sup>

The use of specific HPV genotyping is supported in guideline recommendations from professional organizations. The American College of Obstetricians and Gynecologists (ACOG) recommends co-testing every 5 years as the preferred screening option for cervical cancer in women aged 30-65 years. In cases of cytology-negative, hrHPV-positive co-testing results in women 30 years and older, immediate genotype testing for HPV 16 and 18 is one of two management recommendations, with a positive genotyping result indicating a direct referral for colposcopy.<sup>12</sup>

Furthermore, recommendations of the American Society for Colposcopy and Cervical Pathology (ASCCP) include genotyping for HPV 16 and HPV 18 in conjunction with cytology for CIN 3+ risk stratification. The increased risk due to the presence of HPV 16 or HPV 18 can indicate more aggressive surveillance or intervention depending on the assessment of total CIN 3+ risk. As of the beginning of 2020, reports from screening assays in the United States are currently restricted to the highest-risk types (HPV 16, HPV 18, and sometimes HPV 45), regardless of the genotyping capability of the assay.<sup>13,14</sup>

HPV genotyping directly informs clinical management for women by stratifying genotype-specific results, with or without cytology, which allows for risk-based triaging of cases to either further testing (ie, colposcopy), treatment (highest risk), or re-testing at shortened intervals (lowest risk). Although the primary goal would be to prevent the development of cervical cancer, genotyping serves to balance this with the avoidance of adverse consequences, such as over-testing (invasive diagnostic workups) and overtreatment that increases costs and may lead to negative reproductive outcomes.<sup>12,13</sup>

In summary, HPV genotyping is effective for the secondary prevention of cervical cancer, as supported by studies of clinical utility and in relevant professional society guideline recommendations. Therefore, I am requesting that <Patient Name> be approved for the <test name> test performed by <laboratory>. I hope you will support the medical necessity of this test for <Patient Name>. Please feel free to contact me at <Physician Phone> if you have additional questions.

Sincerely,

<Physician Name>, MD  
NPI #: <Physician NPI#>

Contact information:  
< Address>  
<City>, <State> <Zip>  
Contact Phone: <phone number>

## References

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