

SURVEY DEL CERVICOCARCINOMA DELLA REGIONE EMILIA –  
ROMAGNA 2024

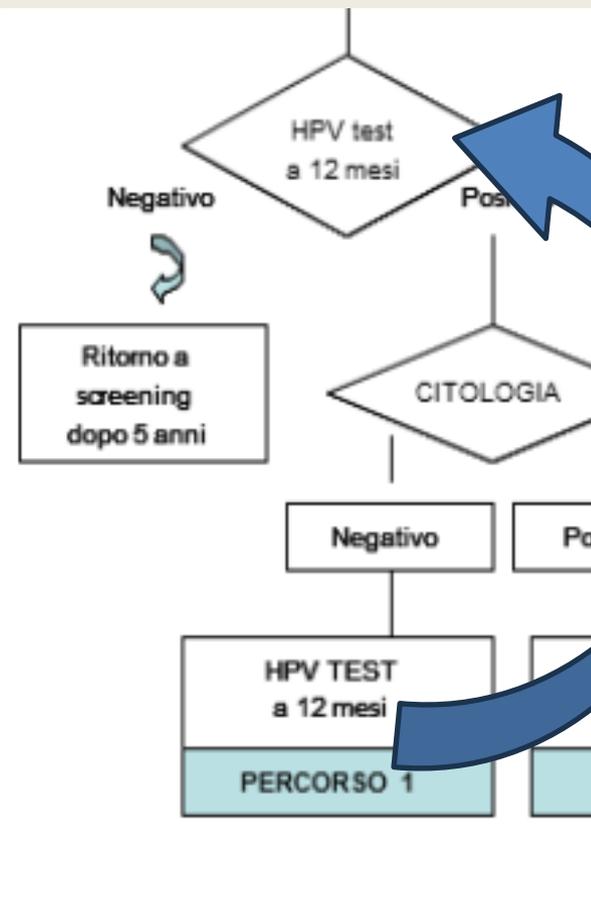
# Gestione clinica e comunicativa delle donne con HPV persistente

**Germana Gotti**

*Responsabile percorso screening cervicocarcinoma  
provincia di Ferrara  
Ausl Ferrara*



SERVIZIO SANITARIO REGIONALE  
EMILIA-ROMAGNA



Per quante  
volte?



## IMPLICAZIONI

### ***Aspetti organizzativi e sanitari:***

Liste di attesa lunghe  
Aumento donne in follow up  
Non sempre corretta comunicazione  
dei dati  
Rischio di sovratrattamento  
Rischio di sottotrattamento

### ***Effetti sulla utente:***

Ansia  
Perdita di ore di lavoro  
Tempi attesa lunghi con  
fuga nel privato  
Rischi di sovrattamento  
Rischi di sottotrattamento

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EMILIA-ROMAGNA



Sono malata?

Perche' sono  
sempre  
positiva?

Sara' pericoloso  
per il mio  
partner?



- Cosa si chiede al colposcopista?
- Quale rischio ha la persistenza?
- Quali strategie si potrebbero utilizzare?

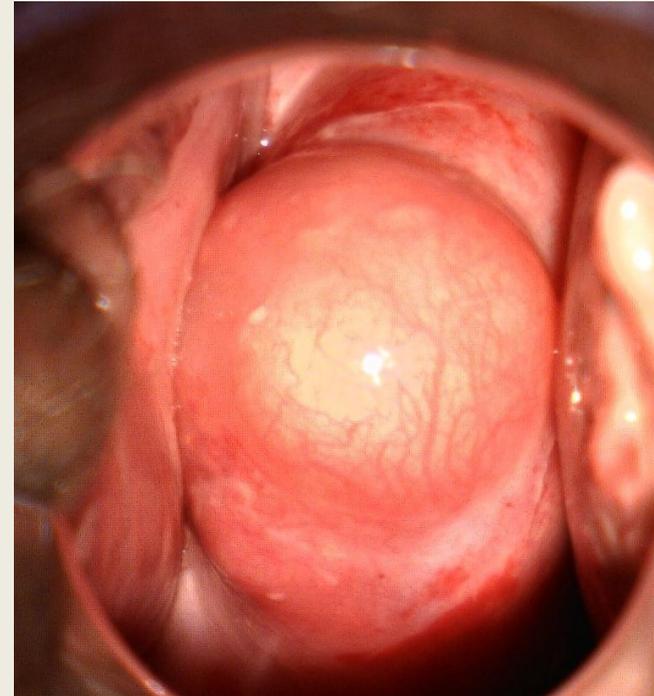
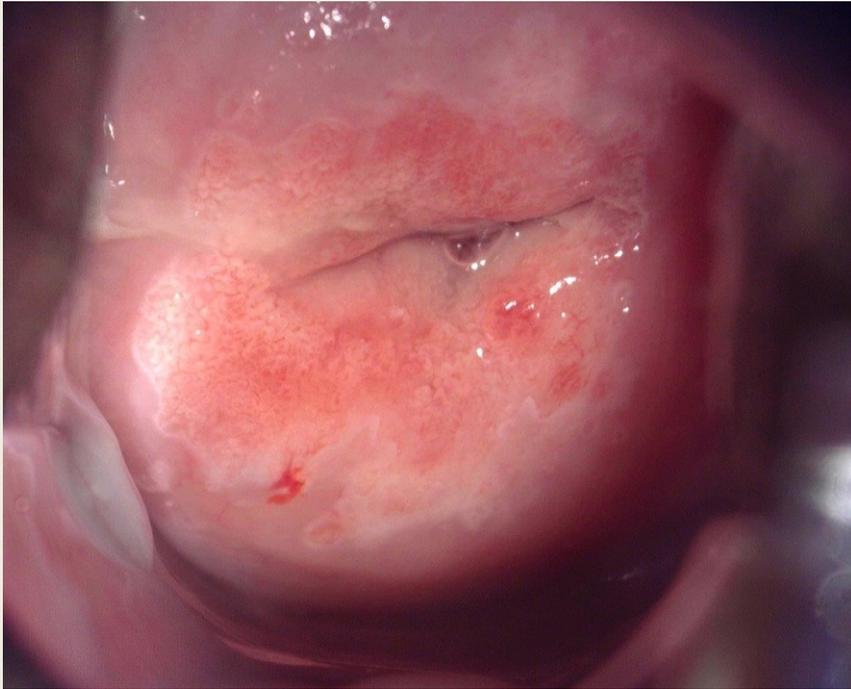
La storia naturale dell'infezione cervicale da HPV dipende dal tipo di HPV e dalla risposta immunitaria dell'ospite:

- l'esito più frequente è la clearance
- la persistenza deriva da un mancato controllo immunitario
- la latenza può verificarsi per controllo immunitario parziale

La riattivazione di una infezione latente è possibile anche a distanza di (molti) anni e può determinare lo sviluppo di lesioni

La pericolosità della persistenza dipende da diversi fattori:

1. Performance colposcopica
2. Storia cito-colposcopica
3. Tipo di HPV



Al colposcopista viene chiesta **accuratezza diagnostica**

**Fattori che influenzano l'accuratezza:**

Sede endocervicale della lesione	sensibilità 68% vs 78% esocervice
Età della donna	sottostima 20% vs 10% <50 anni
Stato post menopausale	sottostima 27% vs 7% premenopausa
Esperienza del colposcopista	sensibilità 68% vs 80% > 5 anni
Numero di biopsie	1 biopsia sensibilità 65% 2 biopsie 90-100%

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2023

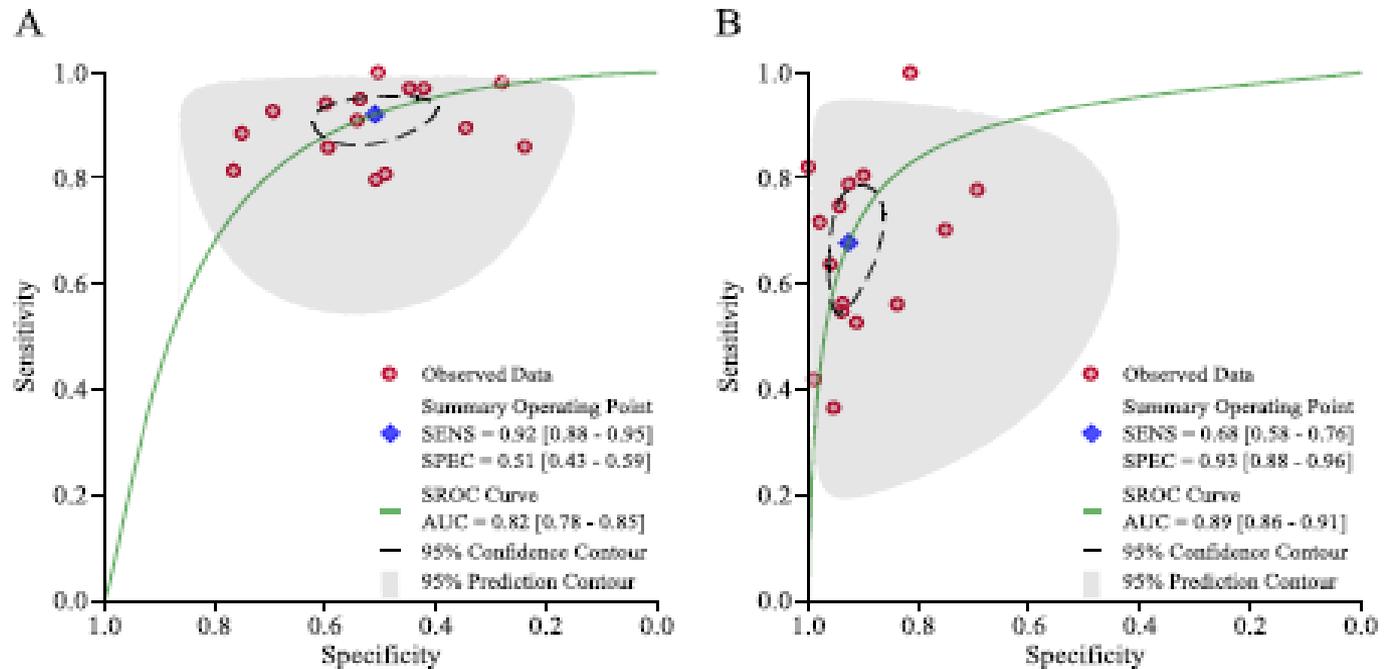
BMC Cancer

Open Access

Colposcopic accuracy in diagnosing squamous intraepithelial lesions: a systematic review and meta-analysis of the International Federation of Cervical Pathology and Colposcopy 2011 terminology

Dongou Qin<sup>1</sup>, Anying Bai<sup>1</sup>, Peng Xue<sup>2</sup>, Samuel Seery<sup>2</sup>, Jiaxu Wang<sup>3</sup>, Maria Jose Gonzalez Mendez<sup>3</sup>, Qing Li<sup>4</sup>, Yu Jiang<sup>5</sup> and Youlin Qiao<sup>1\*</sup>

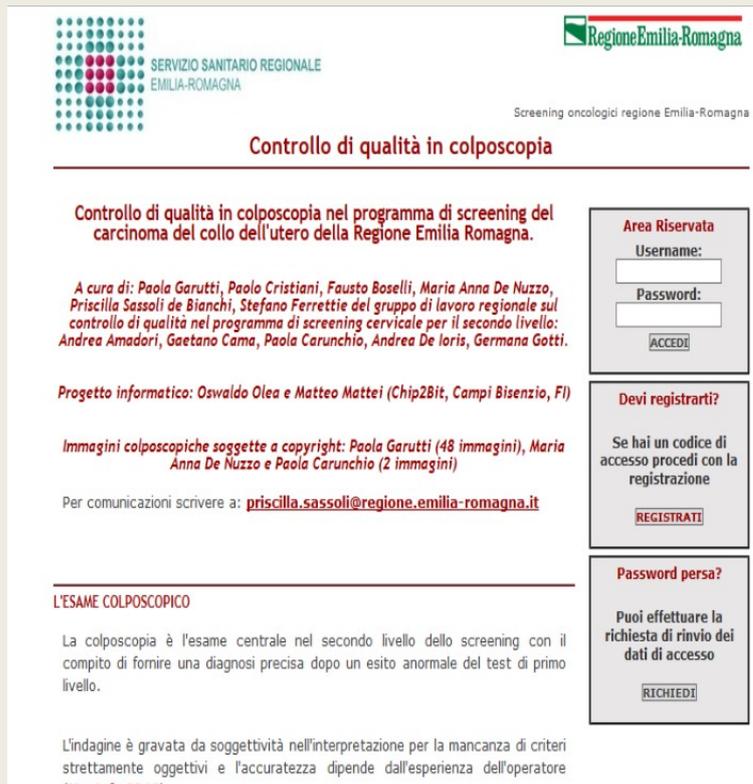
## Come cambia l'accuratezza in base a impressione colposcopica



**Fig. 2** Sensitivity and specificity reported for diagnostic colposcopic impression in 14 studies (each study represented by a point in the figure) relative to the gold standard of biopsy for distinguishing **A** <LSIL from LSIL+; **B** <HSIL from HSIL+. The solid line in the graph shows the receiver operating characteristic curve determined from regression analysis

# SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA

## Dati corso colposcopisti ER



The screenshot shows the website for the 'Controllo di qualità in colposcopia' program. At the top left is the logo of the Servizio Sanitario Regionale Emilia-Romagna, and at the top right is the logo of the Regione Emilia-Romagna. The main heading is 'Controllo di qualità in colposcopia'. Below this, there is a section titled 'Controllo di qualità in colposcopia nel programma di screening del carcinoma del collo dell'utero della Regione Emilia Romagna.' followed by a list of names: Paola Garutti, Paolo Cristiani, Fausto Boselli, Maria Anna De Nuzzo, Priscilla Sassoli de Bianchi, Stefano Ferretti, Andrea Amadori, Gaetano Cama, Paola Carunchio, Andrea De Ioris, and Germana Gotti. There are three login forms on the right side: 'Area Riservata' with fields for Username and Password and an 'ACCEDI' button; 'Devi registrarti?' with a 'REGISTRATI' button; and 'Password persa?' with a 'RICHIEDI' button. At the bottom, there is a section titled 'L'ESAME COLPOSCOPICO' with text explaining the procedure and a note about the importance of operator experience.

## RISULTATI DEL TEST

	2011	2017
K per diagnosi	69	73
Conc osservata	78	81

# SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA

Corso 2025 sul controllo di qualità dei colposcopisti

24 gennaio 2025

AULA MAGNA - VIALE ALDO MORO 30, BOLOGNA



2025  
SEMINARI  
REGIONALI

#### PROGRAMMA

SETTORE PREVENZIONE  
COLLETTIVA E SANITA'  
PUBBLICA DELLA REGIONE  
EMILIA-ROMAGNA IN  
COLLABORAZIONE CON AUSL  
DELLA ROMAGNA

LA QUALITÀ IN  
COLPOSCOPIA  
NELLO SCREENING  
CERVICALE DELLA  
REGIONE EMILIA-ROMAGNA

# SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA

Performance of standardised colposcopy to detect cervical precancer and cancer for triage of women testing positive for human papillomavirus: results from the ESTAMPA multicentric screening study



2023



Joan Valls, Armando Baena, Gino Venegas, Marcela Celis, Mauricio González, Carlos Sosa, Jorge Luis Santín, Marina Ortega, Ana Soñán, Elmer Turcios, Jacqueline Figueroa, Margarita Rodríguez de la Peña, Alicia Figueredo, Andrea Verónica Beracochea, Natalia Pérez, Josefina Martínez-Better, Oscar Lora, Julio Yamil Jiménez, Diana Giménez, Laura Fleider, Yuly Salgado, Sandra Martínez, Yenny Bellido-Fuentes, Betsy Flores, Silvio Tatti, Verónica Villagra, Aurelio Cruz-Valdez, Carolina Terán, Gloria Inés Sánchez, Guillermo Rodríguez, María Alejandra Picconi, Annabelle Ferrera, Laura Mendoza, Alejandro Calderón, Raul Murillo, Carolina Wiesner, Nathalie Broutet, Silvana Luciani, Carlos Pérez, Teresa M Darragh, José Jerónimo, Rolando Herrero, Maribel Almonte, on behalf of the ESTAMPA study group\*

Come cambia l'accuratezza  
in base a età

## By age

Sensitivity for CIN3+	..	..	..	..	p<0.0001
30-49 years	534	1616	37	1191	93.5% (91.3-95.3)
50-65 years	76	410	22	613	77.6% (68.6-85.0)
Specificity for less than CIN2	..	..	..	..	p<0.0001
30-49 years	763	1387	61	1167	45.7% (43.8-47.6)
50-65 years	113	373	32	603	61.8% (58.7-64.8)

# SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA



2023



Article  
Colposcopy Accuracy and Diagnostic Performance: A Quality Control and Quality Assurance Survey in Italian Tertiary-Level Teaching and Academic Institutions—The Italian Society of Colposcopy and Cervico-Vaginal Pathology (SICPCV)

Massimo Origoni <sup>1</sup>, Francesco Cantatore <sup>1</sup>, Francesco Sopracordevole <sup>2</sup>, Nicolò Clemente <sup>2</sup>, Arsenio Spinillo <sup>3</sup>, Barbara Gardella <sup>3</sup>, Rosa De Vincenzo <sup>4,5</sup>, Caterina Ricci <sup>5</sup>, Fabio Landoni <sup>6</sup>, Maria Letizia Di Meo <sup>6</sup>, Andrea Ciavattini <sup>7</sup>, Jacopo Di Giuseppe <sup>7</sup>, Eleonora Preti <sup>8</sup>, Anna Daniela Iacobone <sup>8,9</sup>, Carmine Carriero <sup>10</sup>, Miriam Dellino <sup>10</sup>, Massimo Capodanno <sup>11</sup>, Antonino Perino <sup>12</sup>, Cesare Miglioli <sup>13</sup>, Luca Insolia <sup>13</sup>, Maggiorino Barbero <sup>14</sup> and Massimo Candiani <sup>1</sup>

Come cambia l'accuratezza in base a esperienza del colposcopista e a GSC

Table 2. SCJ assessment (2011 IFCPC terminology [14]).

Experts Panel	Colposcopists	All	Experience in Colposcopy		
			Seniors	Juniors	
fully visibile	<b>fully visibile</b> #	81.2%	80.3%	82.6%	<i>p</i> = NS
	<i>not fully visibile</i> *	12.9%	13.4%	12.1%	
	<i>not visibile</i>	5.9%	6.3%	5.3%	
not fully visibile	<i>fully visibile</i>	29.3%	28.2%	31.2%	<i>p</i> = NS
	<b>not fully visibile</b>	51.4%	51.9%	50.5%	
	<i>not visibile</i>	19.3%	19.9%	18.3%	
not visibile	<i>fully visibile</i>	15.2%	12.5%	19.6%	<i>p</i> = 0.011
	<i>not fully visibile</i>	19.9%	20%	19.7%	
	<b>not visibile</b>	64.9%	67.5%	60.7%	

All colposcopists:  $p < 2.2^{-16}$ ; Cohen's kappa correlation coefficient = 0.49 CI 95% [0.47–0.51]. Seniors:  $p < 2.2^{-16}$ ; Cohen's kappa correlation coefficient = 0.49 CI 95% [0.47–0.52]. Juniors:  $p < 2.2^{-16}$ ; Cohen's kappa correlation coefficient = 0.48 CI 95% [0.45–0.51]. # block letters = colposcopists vs. panel full agreement; \* italics = incorrect SCJ judgment by colposcopists; SCJ = squamocolumnar junction; NS = not significant.

# SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA



Current Problems in Cancer  
Volume 42, Issue 5, September 2018, Pages 521-526



The next generation of cervical cancer screening programs: Making the case for risk-based guidelines ☆

Rebecca B. Perkins MD, MS <sup>a</sup>, Mark Schiffman MD, MPH <sup>b</sup>, Richard S. Guido MD <sup>c</sup>

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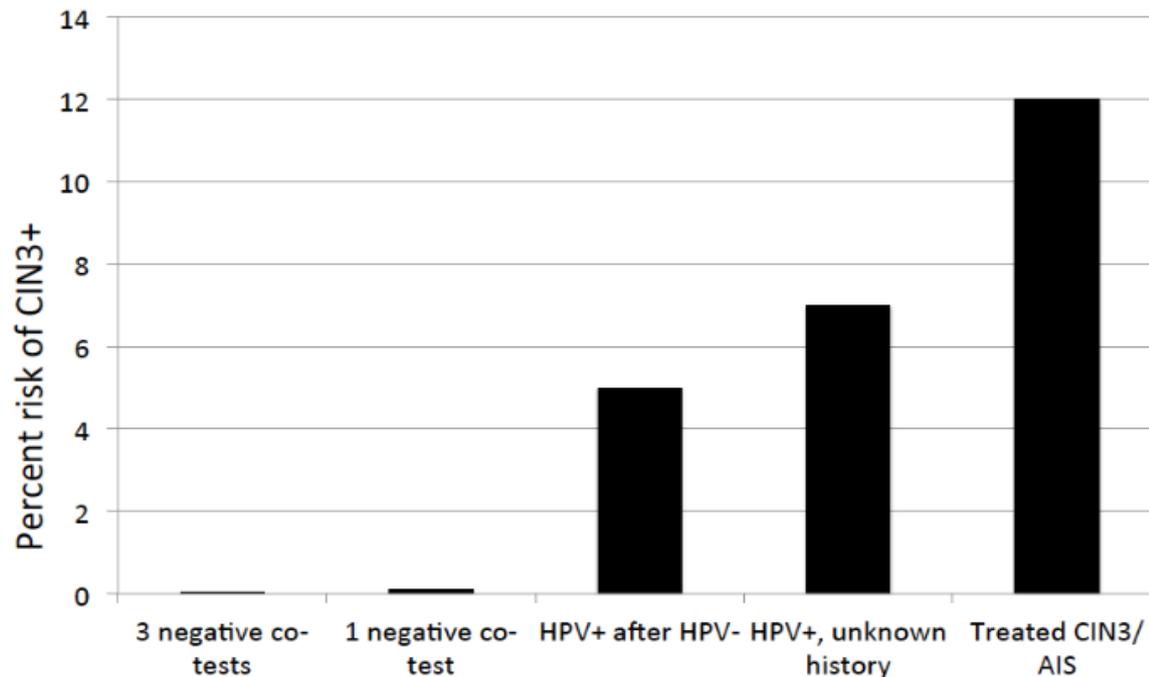
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<https://doi.org/10.1016/j.currprobcancer.2018.06.007>

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## Rischio di cin3 in base alla storia di screening precedente

Figure 1. CIN3+ risk at 5 years



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**BJC**

SHORT COMMUNICATION

British Journal of Cancer (2017) 117, 1557–1561 | doi: 10.1038/bjc.2017.309

Keywords: cervical screening; human papillomavirus (HPV); cervical intraepithelial neoplasia (CIN); triage testing; repeat HPV testing; HPV infection risk

## HPV-positive women with normal cytology remain at increased risk of CIN3 after a negative repeat HPV test

Nicole J Polman<sup>1</sup>, Nienke J Veldhuijzen<sup>2</sup>, Daniëlle A M Heideman<sup>1</sup>, Peter J F Snijders<sup>1</sup>, Chris J L M Meijer<sup>1</sup> and Johannes Berkhof<sup>2</sup>

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Il rischio cumulativo cin3+ in donne con HPV test positivo (citologia negativa) e hpv test negativo al primo controllo risulta del 2%, significativamente superiore allo 0.2% delle donne con doppio HPV test negativo

**Table 2. Risk of CIN3+/2+ in HPV-pos/cyt-neg women and in HPV-neg/cyt-neg women**

Baseline	Repeat test result	Dopo 5 anni	Total	CIN3+		Sign (P=0.001)	CIN2+		Sign (P<0.001)
				n	%		n	%	
HPV-pos/cyt-neg	HPV-negative test result at first repeat test		199	4	2.0		11	5.5	
HPV-pos/cyt-neg	HPV-negative test result at first or second repeat test		256	9	3.5		18	7.0	
HPV-neg/cyt-neg	–		18 562	41	0.2	–	88	0.5	–

Abbreviations: CIN3/2+ = cervical intraepithelial neoplasia grade 3/2 or worse; HPV = human papillomavirus; NS = not significantly different when compared with HPV-neg/cyt-neg women; sign = significantly different when compared with HPV-neg/cyt-neg women.

# SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA

CANCER EPIDEMIOLOGY, BIOMARKERS & PREVENTION | RESEARCH ARTICLE

## Risk of Cervical Intraepithelial Neoplasia Grade 3 or Worse in HPV-Positive Women with Normal Cytology and Five-Year Type Concordance: A Randomized Comparison



Federica Inturrisi<sup>1</sup>, Johannes A. Bogaards<sup>1,2</sup>, Daniëlle A.M. Heideman<sup>3</sup>, Chris J.L.M. Meijer<sup>3</sup>, and Johannes Berkhof<sup>1</sup>

**Table 1.** CIN3+ and CIN2+ in HPV-positive women in the baseline round (intervention group) versus next round (control group, in bold).

Baseline round	Next round	18 mesi	N	CIN3+			CIN2+		
				n	%	RR (95% CI)	n	%	RR (95% CI)
HPV-pos			1,066	164	15%	1.0 (ref)	249	23%	1.0 (ref)
HPV-pos/cyt-neg			730	32	4%		66	9%	
HPV-pos/cyt-neg	HPV-pos		111	40	36%	2.3 (1.8-3.1)	48	43%	1.9 (1.5-2.4)
	type concordance		91	36	40%	2.6 (1.9-3.4)	43	47%	2.0 (1.6-2.6)
	type switch		20	4	20%	1.3 (0.5-3.2)	5	25%	1.1 (0.5-2.3)

Abbreviations: cyt, cytology; HPV, human papillomavirus; neg, negative; pos, positive.

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**Table 2.** CIN3+ and CIN2+ in women with HPV type(s) 16, 16/18, 16/18/31/33/45 or other high-risk type(s) infection in the baseline round (intervention group) versus type concordant infection in the next round (control group, in bold).

Baseline round	Next round	N	CIN3+			CIN2+		
			n	%	RR (95% CI)	n	%	RR (95% CI)
HPV16-pos		343	103	30%	1.0 (ref)	140	41%	1.0 (ref)
HPV16-pos/cyt-neg		211	24	11%		40	19%	
<b>HPV16-pos/cyt-neg</b>	<b>HPV16-pos</b>	<b>38</b>	<b>23</b>	<b>61%</b>	<b>2.0 (1.5-2.7)</b>	<b>24</b>	<b>63%</b>	<b>1.5 (1.2-2.0)</b>
hrHPV-pos and HPV16-neg		723	61	8%	1.0 (ref)	109	15%	1.0 (ref)
hrHPV-pos/cyt-neg and HPV16-neg		519	8	2%		26	5%	
<b>hrHPV-pos/cyt-neg and HPV16-neg</b>	<b>At least one concordant type and HPV16-neg</b>	<b>49</b>	<b>11</b>	<b>22%</b>	<b>2.7 (1.5-4.7)</b>	<b>16</b>	<b>33%</b>	<b>2.2 (1.4-3.4)</b>
HPV16/18-pos		427	113	26%	1.0 (ref)	161	38%	1.0 (ref)
HPV16/18-pos/cyt-neg		263	27	10%		48	18%	
<b>HPV16/18-pos/cyt-neg</b>	<b>At least one concordant type</b>	<b>49</b>	<b>25</b>	<b>51%</b>	<b>1.9 (1.4-2.6)</b>	<b>27</b>	<b>55%</b>	<b>1.5 (1.1-1.9)</b>
hrHPV-pos and HPV16/18-neg		639	51	8%	1.0 (ref)	88	14%	1.0 (ref)
hrHPV-pos/cyt-neg and HPV16/18-neg		467	5	1%		18	4%	
<b>hrHPV-pos/cyt-neg and HPV16/18-neg</b>	<b>At least one concordant type and HPV16/18-neg</b>	<b>39</b>	<b>10</b>	<b>26%</b>	<b>3.2 (1.8-5.8)</b>	<b>14</b>	<b>36%</b>	<b>2.6 (1.6-4.1)</b>
HPV16/18/31/33/45-pos		697	147	21%	1.0 (ref)	214	31%	1.0 (ref)
HPV16/18/31/33/45-pos/cyt-neg		456	31	7%		60	13%	
<b>HPV16/18/31/33/45-pos/cyt-neg</b>	<b>At least one concordant type</b>	<b>76</b>	<b>29</b>	<b>38%</b>	<b>1.8 (1.3-2.5)</b>	<b>34</b>	<b>45%</b>	<b>1.5 (1.1-1.9)</b>
hrHPV-pos and HPV16/18/31/33/45-neg		369	17	5%	1.0 (ref)	35	9%	1.0 (ref)
hrHPV-pos/cyt-neg and HPV16/18/31/33/45-neg		274	1	0.4%		6	2%	
<b>hrHPV-pos/cyt-neg and HPV16/18/31/33/45-neg</b>	<b>At least one concordant type and HPV16/18/31/33/45-neg</b>	<b>11</b>	<b>5</b>	<b>45%</b>	<b>9.9 (4.4-21.9)</b>	<b>6</b>	<b>55%</b>	<b>5.8 (3.1-10.7)</b>

Abbreviations: cyt, cytology; HPV, human papillomavirus; hr, high-risk; neg, negative; pos, positive.

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journal homepage: <https://www.journals.elsevier.com/eclinicalmedicine>



Research Paper

## A study of type-specific HPV natural history and implications for contemporary cervical cancer screening programs

Maria Demarco<sup>a,b,1,\*</sup>, Noorie Hyun<sup>a,c,1</sup>, Olivia Carter-Pokras<sup>b</sup>, Tina R. Raine-Bennett<sup>d</sup>, Li Cheung<sup>a</sup>, Xiaojian Chen<sup>a</sup>, Anne Hammer<sup>e,f</sup>, Nicole Campos<sup>g</sup>, Walter Kinney<sup>h</sup>, Julia C. Gage<sup>a</sup>, Brian Befano<sup>i</sup>, Rebecca B. Perkins<sup>i</sup>, Xin He<sup>g</sup>, Cher Dallal<sup>h</sup>, Jie Chen<sup>g</sup>, Nancy Poitras<sup>k</sup>, Marie-Helene Mayrand<sup>l,m</sup>, Francois Coutlee<sup>n</sup>, Robert D. Burk<sup>o</sup>, Thomas Lorey<sup>k</sup>, Philip E. Castle<sup>o</sup>, Nicolas Wentzensen<sup>a</sup>, Mark Schiffman<sup>n</sup>

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<sup>k</sup> Regional Laboratory, Kaiser Permanente Northern California, Berkeley, CA, United States

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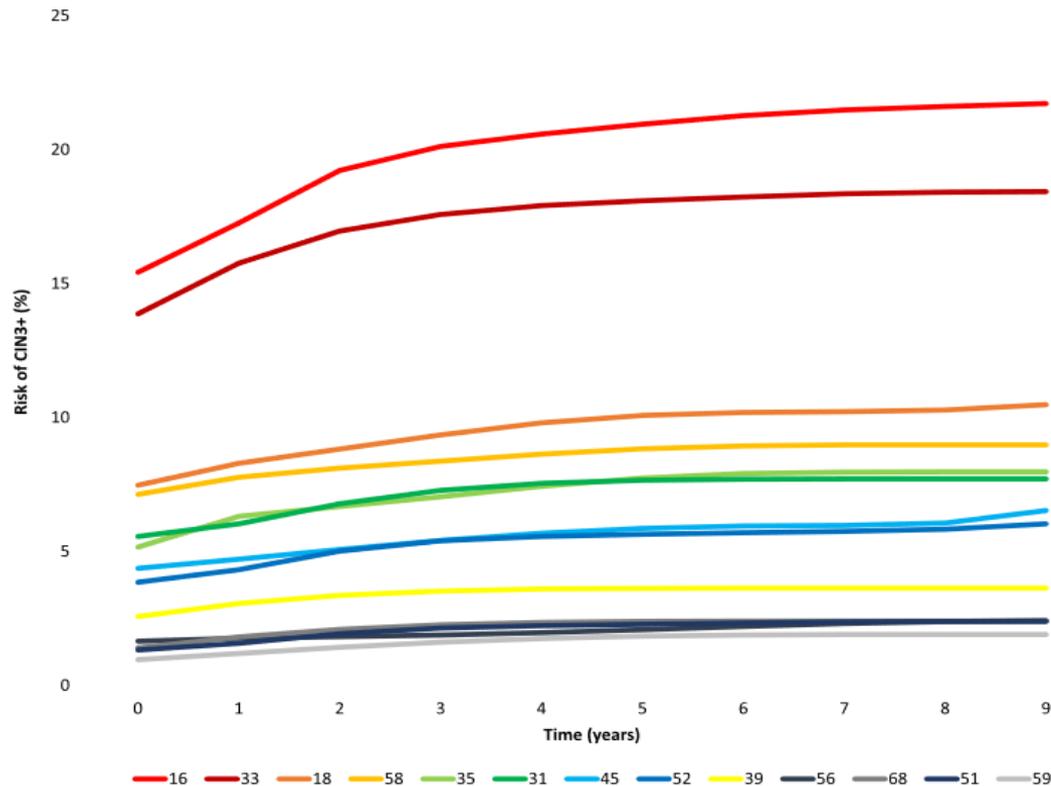
<sup>m</sup> Department of Social and Preventive Medicine, Université de Montréal and Centre de recherche du Centre hospitalier de l'Université de Montréal (CRCHUM), Montreal, Canada

<sup>n</sup> Department of Microbiology, Université de Montréal and CRCHUM, Montreal, Canada

<sup>o</sup> Albert Einstein College of Medicine, Bronx, NY, United States

Hpv 16 e 33 hanno un rischio aumentato di progressione a 7 anni

M. Demarco et al. / EClinicalMedicine 22 (2020) 100293



Rischio CIN3 dopo 10  
anni di follow up  
(donne HPV positive  
citologia neg/basso  
grado):

Hpv 16      **19%**  
Other        **0.3%**

DOI: 10.1111/1471-0528.15957  
www.bjog.org

Epidemiology

## Triaging women with human papillomavirus infection and normal cytology or low-grade dyskaryosis: evidence from 10-year follow up of the ARTISTIC trial cohort

24,496 donne

C Gilham,<sup>a</sup>  A Sargent,<sup>b</sup> J Peto<sup>a</sup>

<sup>a</sup> London School of Hygiene & Tropical Medicine, London, UK <sup>b</sup> Clinical Virology, Manchester University NHS Foundation Trust, Manchester, UK

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Email: clare.gilham@lshtm.ac.uk

Accepted 12 September 2019. Published Online 7 November 2019.

**Objectives** To estimate long-term cervical intraepithelial neoplasia grade 3 (CIN3) risks associated with different triage strategies for human papillomavirus positive (HPV+) women with a view to reducing unnecessary referrals.

**Design** The ARTISTIC trial cohort was recruited in Manchester in 2001–03 and was followed up for CIN3 and cancer notification through national registration until December 2015.

**Results** The 10-year cumulative risk of CIN3+ was much higher for women with HPV16/18 infection (19.4%, 95% CI 15.8–23.8% with borderline/low-grade cytology and 10.7%, 95% CI 8.3–13.9% with normal cytology) than for those with other HPV types (7.3%, 95% CI 5.4–9.7% with borderline/low-grade cytology and 3.2%, 95% CI 2.2–4.5% with normal cytology). Among the 379 women with normal to low-grade cytology and new HPV infection, the 10-year cumulative CIN3+ risk was 2.9% (95% CI 1.6–5.2%).

**Conclusions** The CIN3 risk is confined to women with persistent type-specific HPV so partial genotyping test assays identifying HPV16/18 as a minimum are essential for efficient risk stratification. Immediate referral to colposcopy for HPV+ women

with borderline or low-grade cytology and referral after a year if still HPV+ with normal cytology may be unnecessary. Low-grade lesions can safely be retested to identify those with persistent HPV. Recall intervals of 1 year for HPV16/18 and 2 years for other high-risk HPVs are justified for women with normal cytology and might also be considered for women with borderline/low-grade cytology. The minimal risk of invasive cancer that has progressed beyond stage 1A must be weighed against the advantages for patients and the NHS of reducing the number of referrals to colposcopy.

**Keywords** Cervical cancer, cervical screening, cervical intraepithelial neoplasia grade 3, cytology, human papillomavirus, triage.

**Tweetable abstract** Cervical screening would be better for women and cheaper for the NHS if women with HPV and normal to low-grade cytology were retested after a year or two when many infections will have cleared.

**Linked article** This article is commented on by B Böttcher and S Abdel Azim, p. 69 in this issue. To view this mini commentary visit <https://doi.org/10.1111/1471-0528.15983>.

# SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA

Cumulative risk of cervical intraepithelial neoplasia for women with normal cytology but positive for human papillomavirus: systematic review and meta-analysis

Talia Malagón<sup>1</sup>, Karena D. Volesky<sup>1,2</sup>, Sheila Bouten<sup>1</sup>, Claudie Laprise<sup>1,3</sup>, Mariam El-Zein<sup>1</sup>, Eduardo L. Franco<sup>1,2</sup>

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Persistenza dello stesso ceppo virale  
Rischio CIN3:

	cumulativo	hpv16/18
1 anno	2.1 %	3.5%
2 anni	4.3 %	8.1%
5 anni	6.4 %	12.6%

Table 3. Model-predicted average cumulative risk of CIN2+, CIN3+, and cancer for women who were cytology/histology normal but HPV-positive at baseline, with 95% prediction intervals.

HPV type	Cumulative CIN2+ risk (%) <sup>a</sup>		
	1 year (95% prediction interval)	3 years (95% prediction interval)	5 years (95% prediction interval)
HR-HPV	3.9 (0.0 to 11.2)	7.0 (0.0 to 14.0)	9.9 (2.5 to 16.8)
HPV16/18	5.1 (0.0 to 12.3)	10.4 (3.1 to 17.2)	15.4 (8.5 to 21.9)
HR excluding 16/18	2.8 (0.0 to 10.2)	3.7 (0.0 to 11.0)	4.6 (0.0 to 11.8)
HPV16	5.0 (0.0 to 12.2)	10.2 (2.8 to 17.0)	15.1 (8.1 to 21.6)
HPV18	2.6 (0.0 to 10.0)	3.1 (0.0 to 10.4)	3.5 (0.0 to 10.8)
HPV31	4.1 (0.0 to 11.4)	7.5 (0.0 to 14.6)	10.8 (3.2 to 17.8)
HPV33	4.3 (0.0 to 11.6)	8.1 (0.3 to 15.2)	11.7 (4.0 to 18.8)
HPV35	3.0 (0.0 to 10.4)	4.5 (0.0 to 11.7)	5.8 (0.0 to 13.1)
HPV45	3.2 (0.0 to 10.5)	4.8 (0.0 to 12.1)	6.4 (0.0 to 13.6)
HPV51	3.1 (0.0 to 10.4)	4.6 (0.0 to 11.8)	6.0 (0.0 to 13.2)
HPV52	3.3 (0.0 to 10.6)	5.2 (0.0 to 12.4)	7.1 (0.0 to 14.2)
HPV58	3.3 (0.0 to 10.6)	5.2 (0.0 to 12.5)	7.1 (0.0 to 14.3)
HPV59	3.1 (0.0 to 10.4)	4.5 (0.0 to 11.8)	6.0 (0.0 to 13.2)
	Cumulative CIN3+ risk (%) <sup>a</sup>		
HR-HPV	2.1 (0.0 to 9.5)	4.3 (0.0 to 11.5)	6.4 (0.0 to 13.5)
HPV16/18	3.5 (0.0 to 10.8)	8.1 (0.5 to 15.1)	12.6 (5.3 to 19.3)
HR excluding 16/18	1.5 (0.0 to 9.0)	2.5 (0.0 to 9.9)	3.4 (0.0 to 10.7)
HPV16	3.3 (0.0 to 10.6)	7.6 (0.1 to 14.6)	11.8 (4.5 to 18.5)
HPV18	2.3 (0.0 to 9.7)	4.9 (0.0 to 12.1)	7.3 (0.0 to 14.4)
HPV31	2.6 (0.0 to 9.9)	5.5 (0.0 to 12.7)	8.4 (0.9 to 15.4)
HPV33	2.7 (0.0 to 10.1)	6.1 (0.0 to 13.2)	9.3 (1.8 to 16.2)
HPV35	2.2 (0.0 to 9.6)	4.4 (0.0 to 11.7)	6.6 (0.0 to 13.9)
HPV45	2.0 (0.0 to 9.5)	4.0 (0.0 to 11.3)	6.0 (0.0 to 13.1)
HPV51	2.0 (0.0 to 9.5)	4.0 (0.0 to 11.3)	6.0 (0.0 to 13.1)
HPV52	2.1 (0.0 to 9.5)	4.2 (0.0 to 11.5)	6.3 (0.0 to 13.4)
HPV58	2.0 (0.0 to 9.4)	4.0 (0.0 to 11.3)	5.8 (0.0 to 13.1)
HPV59	2.1 (0.0 to 9.5)	4.1 (0.0 to 11.3)	6.0 (0.0 to 13.2)
	Cumulative cervical cancer risk (%) <sup>a,†</sup>		
HR-HPV	0.8 (0.0 to 8.3)	1.2 (0.0 to 8.7)	1.6 (0.0 to 9.1)
HPV16	1.2 (0.0 to 8.7)	2.5 (0.0 to 9.9)	3.7 (0.0 to 11.0)

CIN=cervical intraepithelial neoplasia; HPV=human papillomavirus; HR=high risk.

<sup>a</sup> Negative risks predicted by the model are truncated at 0.0 for coherence.

<sup>†</sup> Results reported only for HPV types assessed in more than one study.



SISTEMA NAZIONALE LINEE GUIDA DELL'ISTITUTO SUPERIORE DI SANITÀ



**Linee guida condivise per la prevenzione del carcinoma della cervice uterina.**  
**Raccomandazioni sul tema dei biomarcatori nello screening cervicale con test HPV**

**Raccomandazioni pubblicate nel Sistema Nazionale Linee Guida**

**Roma, 29 agosto 2024**

GISci in collaborazione con AIO, AOGOI, SIAPEC-IAP, SICI, SICPCV, SIGO, SItI, SIV-ISV

Quanto è importante  
oggi la  
genotipizzazione!

**Nello screening i biomarcatori e/o la  
genotipizzazione  
possono aiutare nella gestione:**

- per decidere invio immediato in colposcopia o richiamo a breve/medio termine in HPV positivo
- per migliorare il follow up nei casi di colposcopia negativa per cin2+
- per garantire tempi ottimali di follow up dopo il trattamento di lesioni alto grado
- gestione delle donne CIN2+ (?)

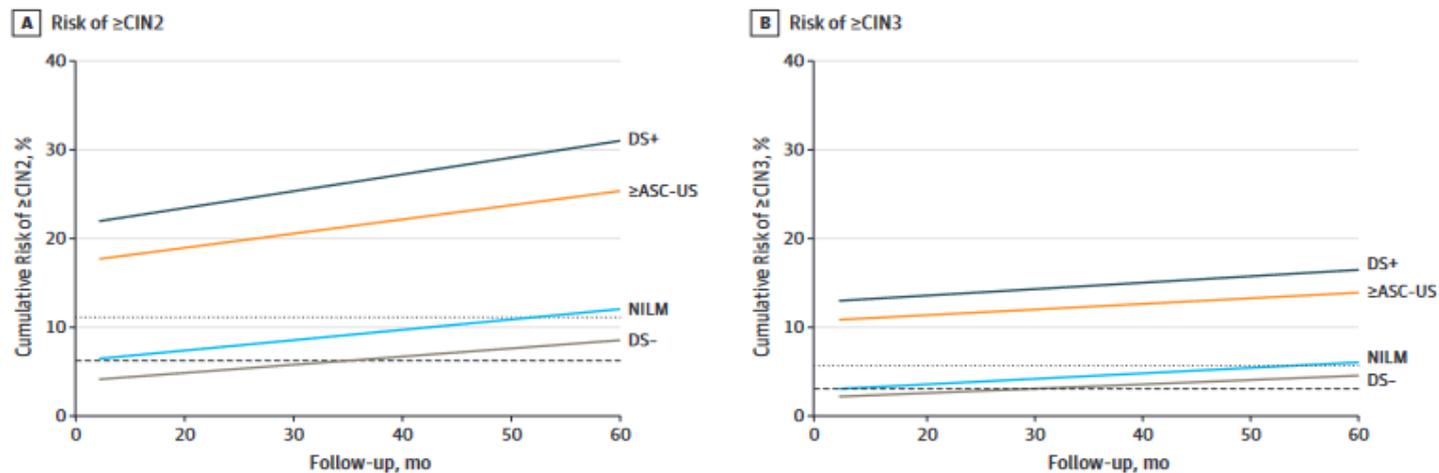
# SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA

JAMA Oncology | Original Investigation

## Five-Year Risk of Cervical Precancer Following p16/Ki-67 Dual-Stain Triage of HPV-Positive Women

Megan A. Clarke, PhD, MHS; Li C. Cheung, PhD; Philip E. Castle, PhD, MPH; Mark Schiffman, MD, MPH;  
Diane Tokugawa, MD; Nancy Poltras, BS; Thomas Lorey, MD; Walter Kinney, MD;  
Nicolas Wentzensen, MD, PhD, MS

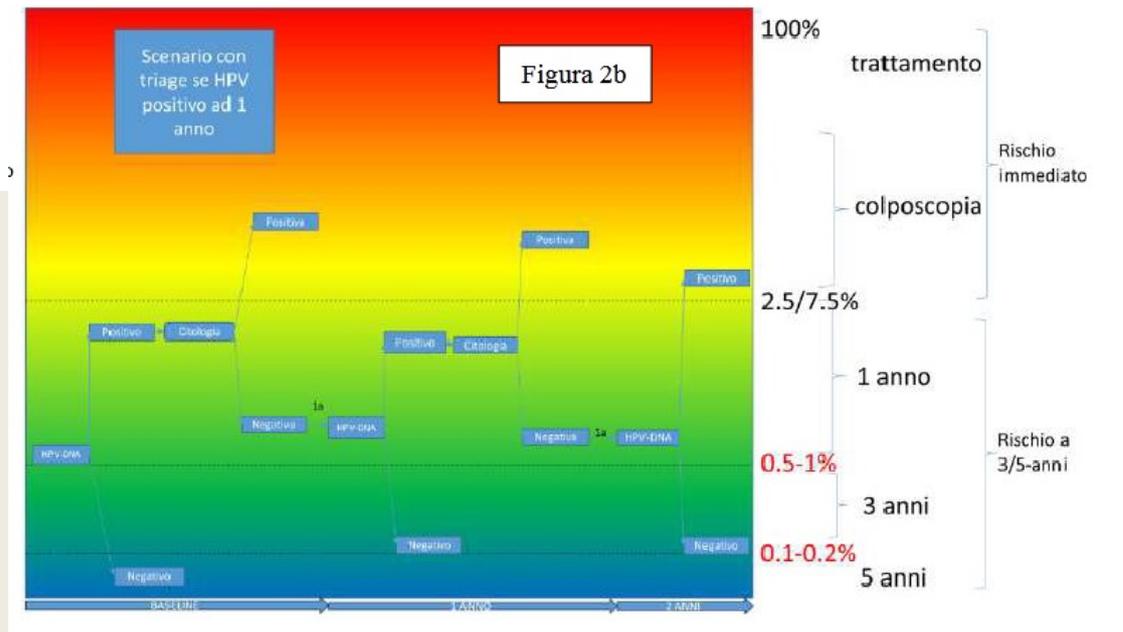
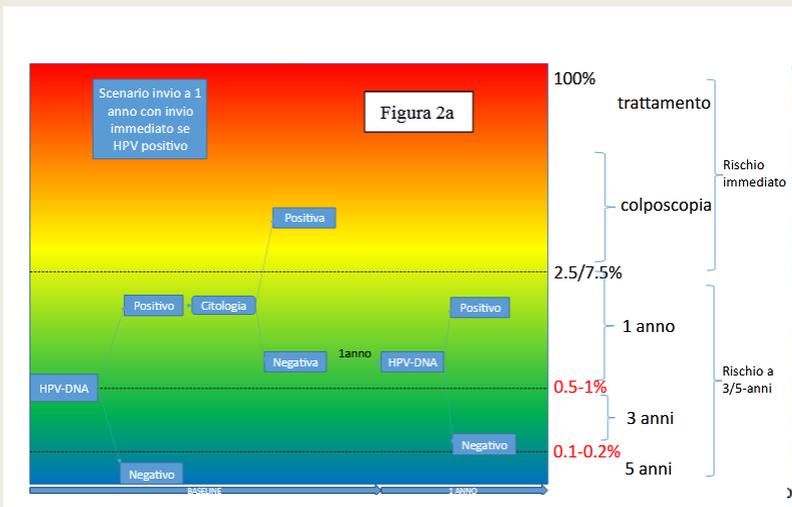
Figure 2. Cumulative Risk of  $\geq$ CIN2 and  $\geq$ CIN3 by p16/Ki-67 Dual-Stain Testing (DS) and Papanicolaou Cytology (Pap) Results



The 5-year cumulative risk curves were generated using the logistic Weibull model. The dashed line corresponds to the threshold for a 1-year return, and the dotted line corresponds to the threshold for immediate colposcopy referral in this study population. Plus sign indicates positive; minus sign, negative; ASC-US

atypical squamous cells of undetermined significance; CIN2, cervical intraepithelial neoplasia grade of 2; CIN3, CIN grade of 3; NILM, negative for intraepithelial lesion or malignancy.

# SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA



SERVIZIO SANITARIO REGIONALE  
EMILIA-ROMAGNA



quanto rischio  
con HPV positivo?

Perche' sono  
sempre  
positiva?

Sara' pericoloso  
per il mio  
partner?

Importante non solo conoscere per saper rispondere ma anche come rispondere....

**Corso:**

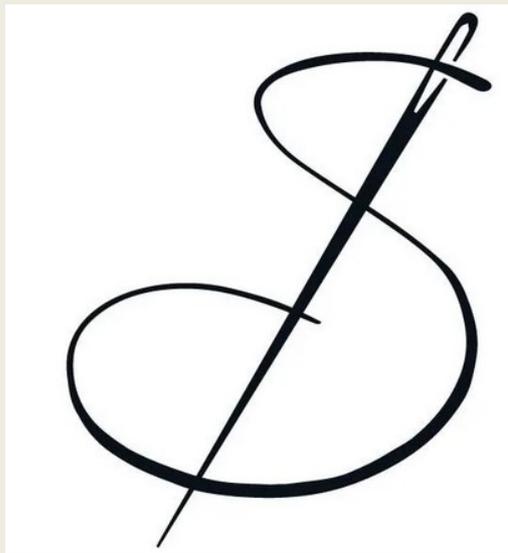
*la sfida comunicativa nello screening cervicale*

**8 aprile 2025**

Aula Magna Ospedale Maggiore di Bologna



Lo screening non è più uguale per tutte!



grazie

