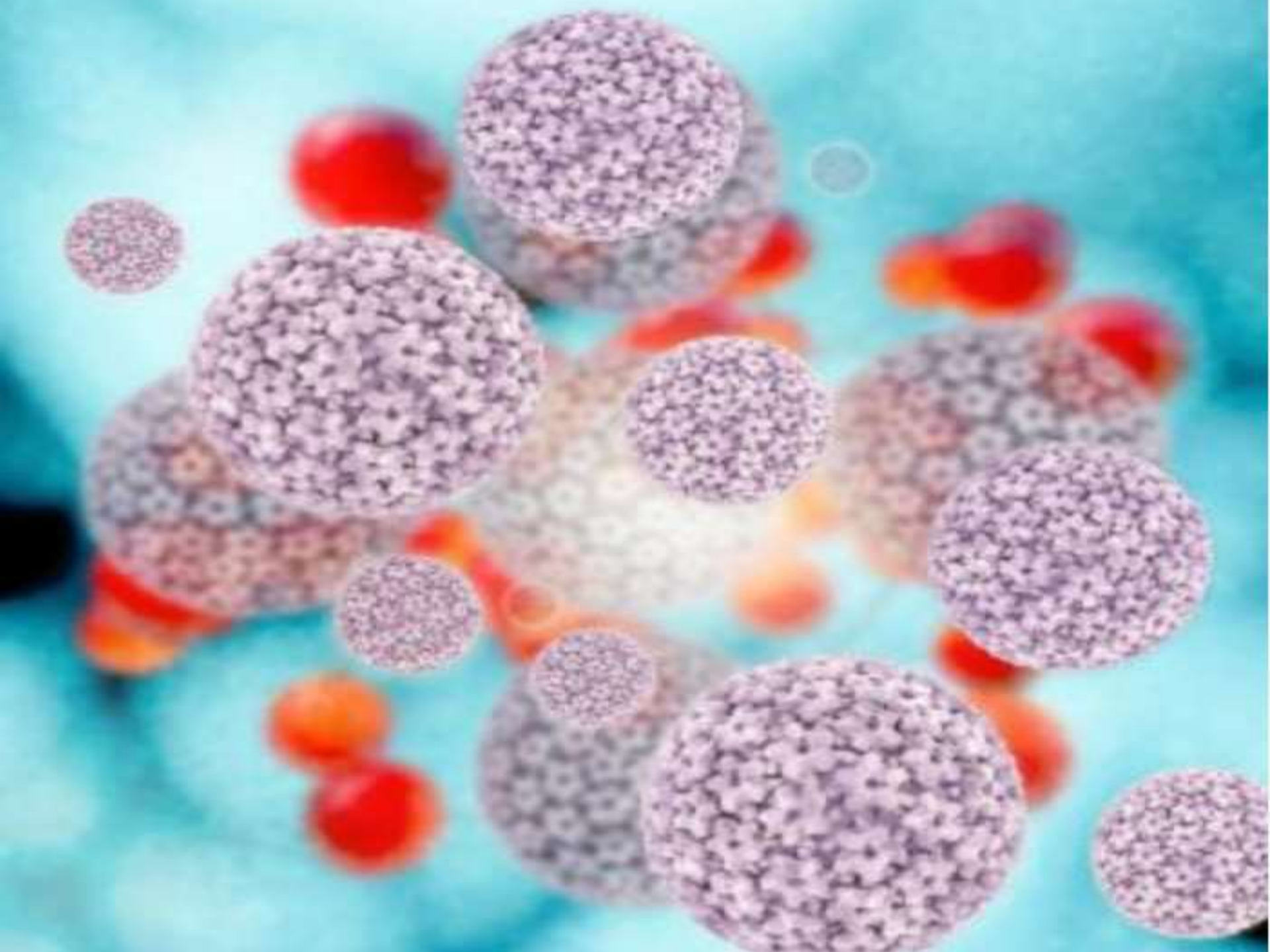


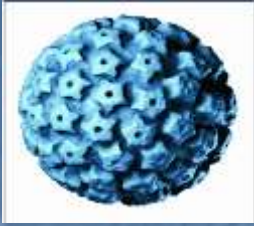
4ο ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΕΦΑΡΜΟΣΜΕΝΗΣ ΦΑΡΜΑΚΕΥΤΙΚΗΣ  
5&6 Μαΐου 2018, The MET Hotel, Θεσσαλονίκη

# Εμβόλια εναντίον της HPV μόλυνσης – Το "κόστος" του φόβου

**Θ. Αγοραστός**

Καθηγητής Μαιευτικής-Γυναικολογίας  
Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης





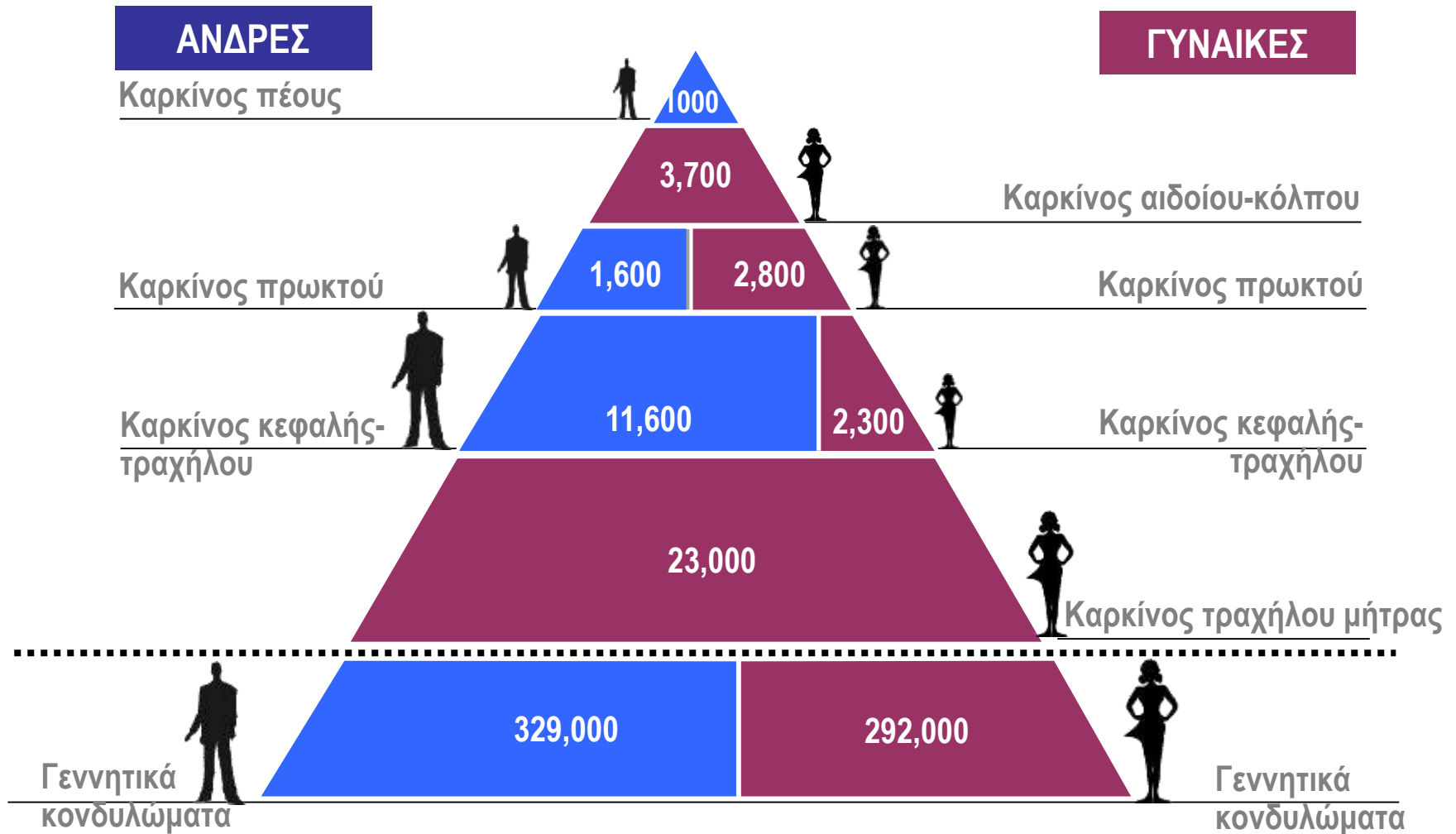
## ΕΠΑΝΑΣΤΑΤΙΚΕΣ ΚΑΙΝΟΤΟΜΙΕΣ ΣΤΗΝ ΙΑΤΡΙΚΗ ΕΠΙΣΤΗΜΗ ΜΕΤΑ ΤΗΝ ΑΝΑΚΑΛΥΨΗ ΤΗΣ ΔΡΑΣΗΣ ΤΟΥ HPV

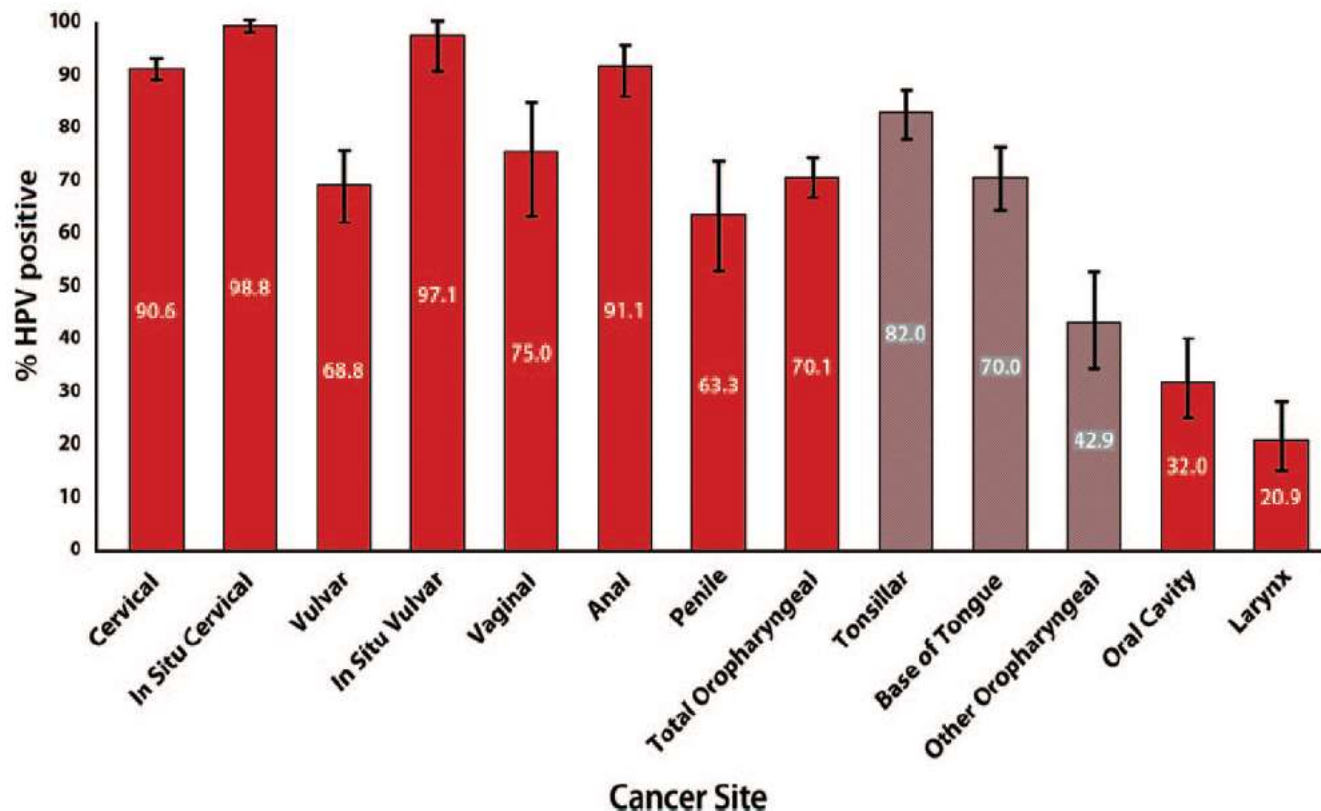
**1. HPV εμβόλιο: Το πρώτο εμβόλιο εναντίον  
καρκίνου!** *(πρωτογενής πρόληψη)*

**2. HPV test: Το πρώτο μοριακό τεστ για  
πληθυσμιακό έλεγχο!** *(δευτερογενής πρόληψη –  
προσυμπτωματικός έλεγχος)*

# HPV-ΣΧΕΤΙΖΟΜΕΝΑ ΝΟΣΗΜΑΤΑ ΣΕ ΓΥΝΑΙΚΕΣ ΚΑΙ ΑΝΔΡΕΣ

Η επιβάρυνση των ανδρών από τον HPV είναι σημαντική και αντιπροσωπεύει το 1/3 των συνολικών σχετιζόμενων με τον HPV καρκίνων. Ο καρκίνος κεφαλής-τραχήλου είναι η πιο σημαντική σχετιζόμενη με τον HPV νόσος για τους άνδρες





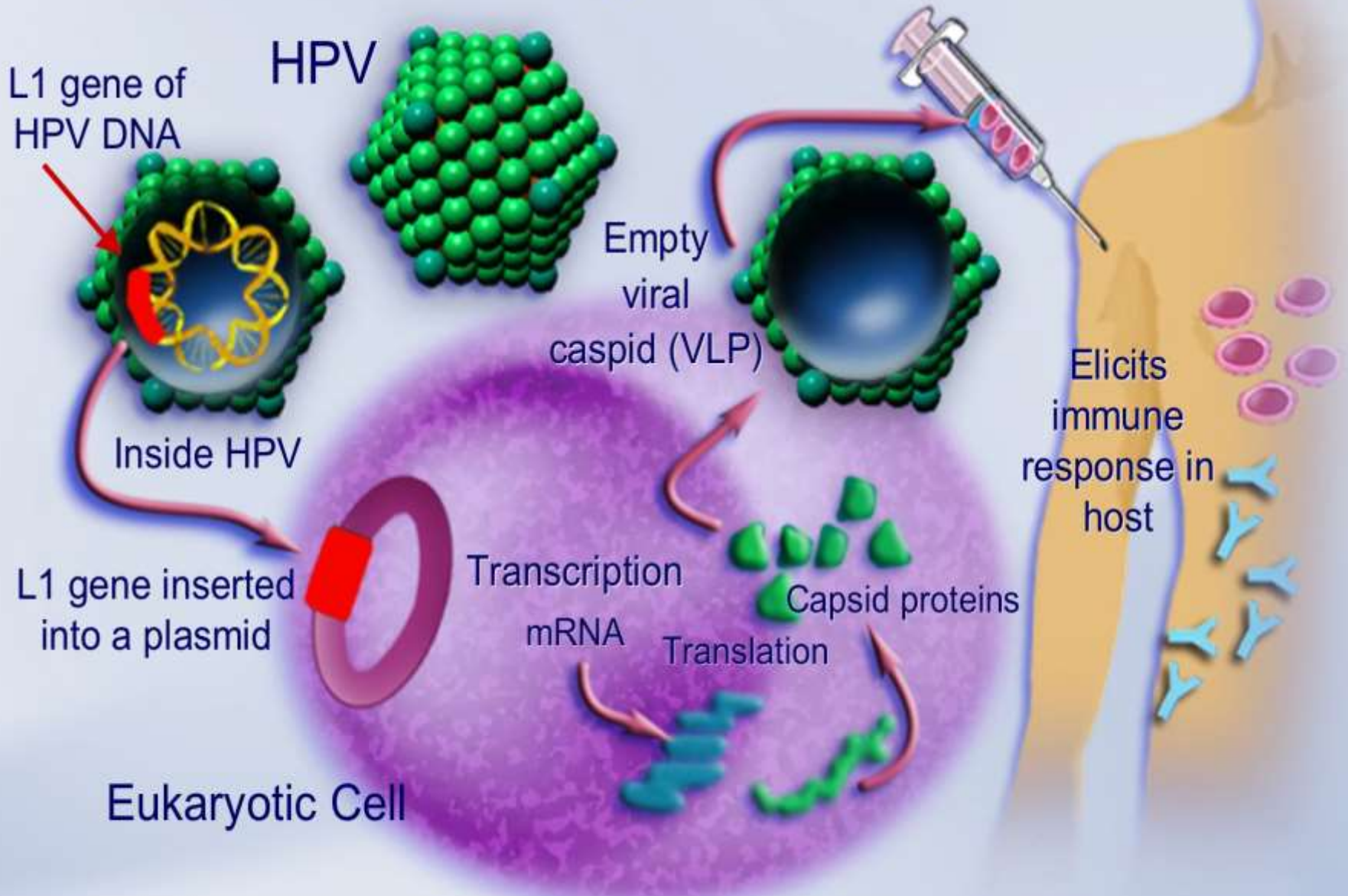
**Figure 2.** Human papillomavirus (HPV) detection by cancer site. The percent HPV-positive cancers was determined using all cancers for that anatomic site as denominator. Ninety-five percent Wilson confidence limits around the prevalence estimates are presented. These percentages reflect the HPV DNA that was detected. Finding HPV in a cancer tissue does not necessarily indicate a causal relationship. International Agency for Research on Cancer defined some cancers to have strong evidence for causal etiology such as cervical, vaginal, vulvar, anal, penile, and oropharyngeal cancers. Oral cavity and laryngeal cancers are considered to have less evidence for causal etiology (larynx) and/or inconsistent correlation with HPV DNA detection and percent causal (oral cavity and larynx). Cancer sites were determined using the following ICD-O-3 morphology codes: C53 (cervix), C51 (vulva), C52 (vagina), C21 (anus), C60 (penis), and C01.9, C02.4, C02.8, C05.1, C05.2, C05.9, C09.0, C09.1, C09.8, C09.9, C10.0, C10.2, C10.8, C10.9, C14.0, C14.2, and C14.8 (oropharynx), C02.0, C02.1, C02.2, C02.3, C02.9, C03.0, C03.1, C03.9, C04.0, C04.1, C04.8, C04.9, C05.0, C06.0, C06.1, C06.2, C06.8, C06.9 (oral tongue and oral cavity), C32.0, C32.1, C32.2, C32.3, C32.8, C32.9 (larynx). ICD-O-3 morphology codes: 9590–9729, 9827 (lymphoma), 8800–8991 (sarcoma), and 8720–8790 (melanoma) were not included.

**ΠΡΩΤΟΓΕΝΗΣ ΠΡΟΛΗΨΗ**

**ΗΡV εμβολιασμός**



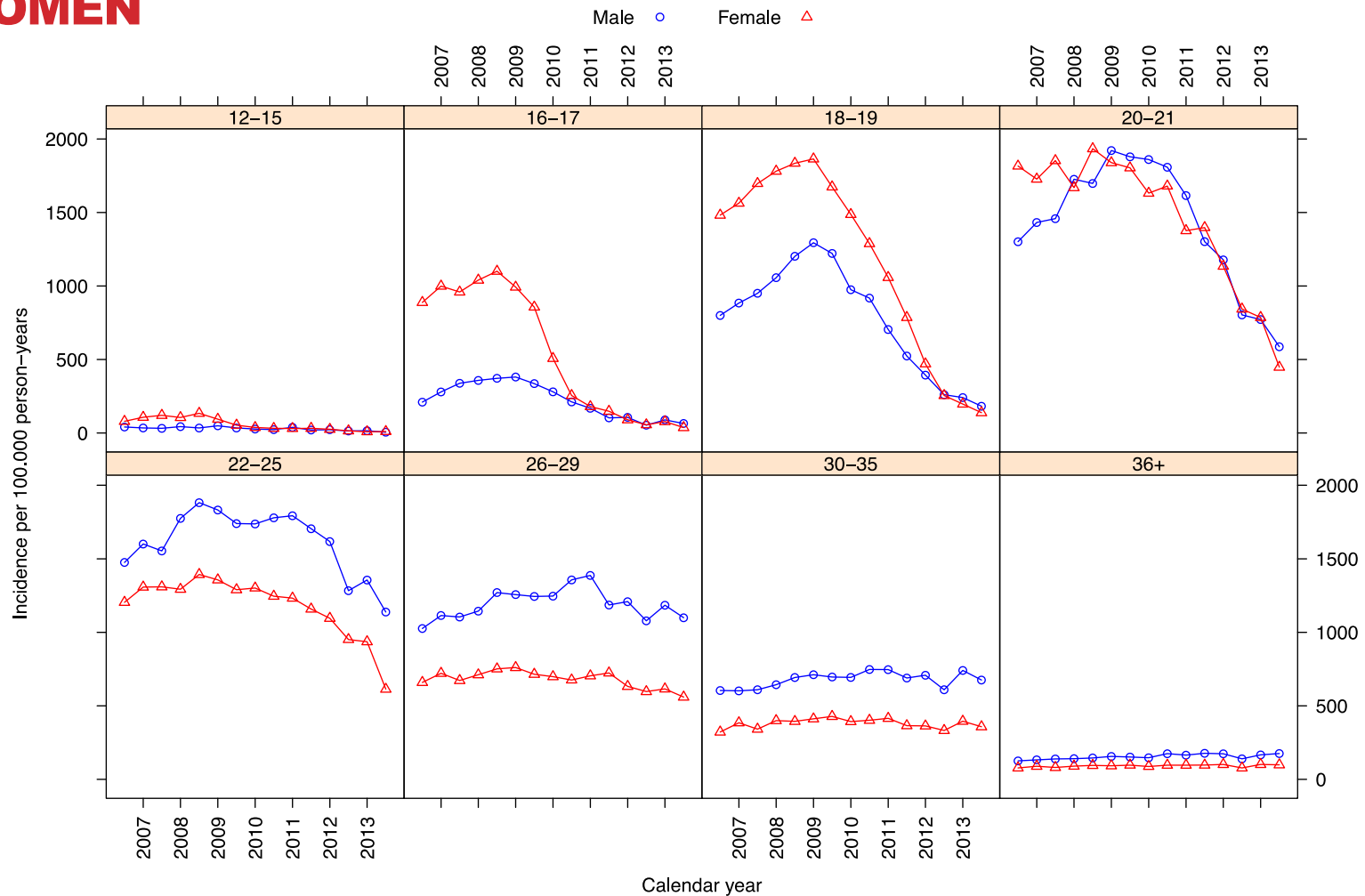
# HPV L1 Virus-Like-Particle (VLP) Vaccine Synthesis



# ΑΠΟΤΕΛΕΣΜΑΤΙΚΟΤΗΤΑ του HPV εμβολίου (2006-2018)

- **Βραχυπρόθεσμα αποτελέσματα** (!)
  - *Ελάττωση του επιπολασμού της HPV λοίμωξης*
  - *Ελάττωση της επίπτωσης των κονδυλωμάτων*
- **Μεσοπρόθεσμα αποτελέσματα** (!)
  - *Ελάττωση επίπτωσης προκαρκινικών αλλοιώσεων*
  - *Ελάττωση διενέργειας κωνοειδών εκτομών τραχήλου*
- **Μακροπρόθεσμα αποτελέσματα** (?)
  - *Ελάττωση επίπτωσης διηθητικών καρκίνων τραχήλου*
  - *Ελάττωση θνησιμότητας από καρκίνο τραχήλου*

# SIGNIFICANT REDUCTION IN THE INCIDENCE OF GENITAL WARTS IN YOUNG MEN 5 YEARS INTO THE DANISH HUMAN PAPILLOMAVIRUS VACCINATION PROGRAM FOR GIRLS AND WOMEN



# 4vHPV Vaccine Effectiveness<sup>a</sup> Against High-grade Cervical Abnormalities



**53%**

Reduction in CIN2/3+ among fully vaccinated vs unvaccinated females 19 to 22 years of age.<sup>1</sup>  
(3 doses of 4vHPV vaccine)



**73%**

Reduction in CIN2/3+ among vaccinated vs unvaccinated females in the 1993 to 1994 birth cohort (18-19 years of age in 2012- ≥1 dose of 4vHPV vaccine)<sup>2</sup>



**75%**

Reduction in CIN2/3+ among vaccinated (before age 17 with 3 doses of 4vHPV vaccine) vs unvaccinated females 13 to 30 years of age.<sup>3</sup>

<sup>a</sup>Vaccinated compared to unvaccinated women; calculated as  $(1 - \text{incidence rate ratios, odds ratio, or hazard ratio}) \times 100$ .

CIN2/3+=cervical intraepithelial neoplasia grade 2 or 3 or worse.

1. Crowe E et al. *BMJ*. 2014;348:g1458. 2. Baldur-Felskov B et al. *J Natl Cancer Inst*. 2014;106:djt460. 3. Herweijer E et al. *Int J Cancer*. 2016;138:2867–2874.

# FIRST EFFECTIVENESS STUDY OF HPV VACCINE AGAINST INVASIVE CANCER

**Table 1.** Numbers (n) and incidence rates (/100 000 woman-years) of human papillomavirus (HPV) associated invasive cancers in cluster-randomized cohorts of altogether 9,529 14 to 17 year-old female HPV16/18 or HPV6/11/16/18 vaccine recipients and 17,838 non-HPV vaccinated, originally 14 to 19 year-old women.<sup>2-4</sup> For corresponding sub-cohorts age-aligned, 7-year periods of passive follow-up were by the population-based Finnish Cancer Registry.

Malignancy	HPV vaccinated women			Non-HPV vaccinated women		
	Person yrs	n	Rate (95%CI)	Person yrs	n	Rate (95% CI)
Cervix cancer	65,656	0	-	124,245	8	6.4 (3.2, 13)
Vulva cancer	65,656	0	-	124,245	1	0.8 (0.1, 5.7)
Oropharyngeal cancer	65,656	0	-	124,245	1	0.8 (0.1, 5.7)
Other HPV cancers*	65,656	0	-	124,245	0	-
All HPV associated invasive cancers	65,656	0	-	124,245	10	8.0 (4.3, 15)
Breast cancer	65,656	2	3.0 (0.8,12)	124,245	10	8.0 (4.3, 15)
Thyroid cancer	65,656	1	1.5 (0.2,11)	124,245	9	7.2 (3.8, 14)
Melanoma	65,656	3	4.6 (1.5,14)	124,245	13	10.5 (6.1, 18)
Non-melanoma skin cancer	65,656	2	3.0 (0.8,12)	124,245	3	2.4 (0.8,7.5)

\*vaginal carcinoma, anal carcinoma

# LONG TERM EFFICACY OF 4HPV: NO BREAKTHROUGH DISEASES UP TO 12 YEARS FOLLOWING START OF VACCINATION

**Table 2. Vaccine Effectiveness Against Human Papillomavirus (HPV) 6/11/16/18-Related Cervical Intraepithelial Neoplasia, Vulvar Cancer, and Vaginal Cancer Among Women Receiving Quadrivalent HPV Vaccine at the Start of the Baseline Study: Per-Protocol Efficacy Population**

Endpoint	n	Number of Cases	Person-Years at Risk	Incidence Rate per 100 Person-Years at Risk (95% Confidence Interval)	Vaccine Effectiveness (%)
<b>Human papillomavirus 6/11/16/18-related CIN, vulvar cancer, and vaginal cancer</b>	2274	1	15242.4	0.0 (0.0, 0.0)	100
<b>By time since day 1 of base study</b>					
4 years or less	2149	0	907.6	0.0 (0.0, 0.4)	
>4 to 6 years	2273	0	4511.5	0.0 (0.0, 0.1)	
>6 to 8 years	2332	1	4367.4	0.0 (0.0, 0.1)	
>8 to 10 years	2111	0	3760.7	0.0 (0.0, 0.1)	
>10 to 12 years	1495	0	1671.8	0.0 (0.0, 0.2)	
>12 to 14 years	140	0	23.0	0.0(0.0, 16.0)	
<b>By lesion type</b>					
CIN 1	2126	1	14070.9	0.0 (0.0, 0.0)	
CIN 2 or worse	2126	0	14070.9	0.0 (0.0, 0.0)	
CIN 2	2126	0	14070.9	0.0 (0.0, 0.0)	
CIN 3 or worse	2126	0	14070.9	0.0 (0.0, 0.0)	
CIN 3	2126	0	14070.9	0.0 (0.0, 0.0)	
Adenocarcinoma in situ	2126	0	14070.9	0.0 (0.0, 0.0)	
Cervical cancer	2126	0	5247.9	0.0 (0.0, 0.0)	
Vulvar cancer	2274	0	15215.9	0.0 (0.0, 0.0)	
Vaginal cancer	2274	0	15215.9	0.0 (0.0, 0.0)	

Abbreviation: CIN, cervical intraepithelial neoplasia.

## Burden of HPV 6, 11, 16, 18, 31, 33, 45, 52, and 58 in invasive cervical cancer

Serrano B, Alemany L, Tous S, Bruni L, F. Bosch X, de Sanjosé S  
 on behalf of the RIS HPV TT study group

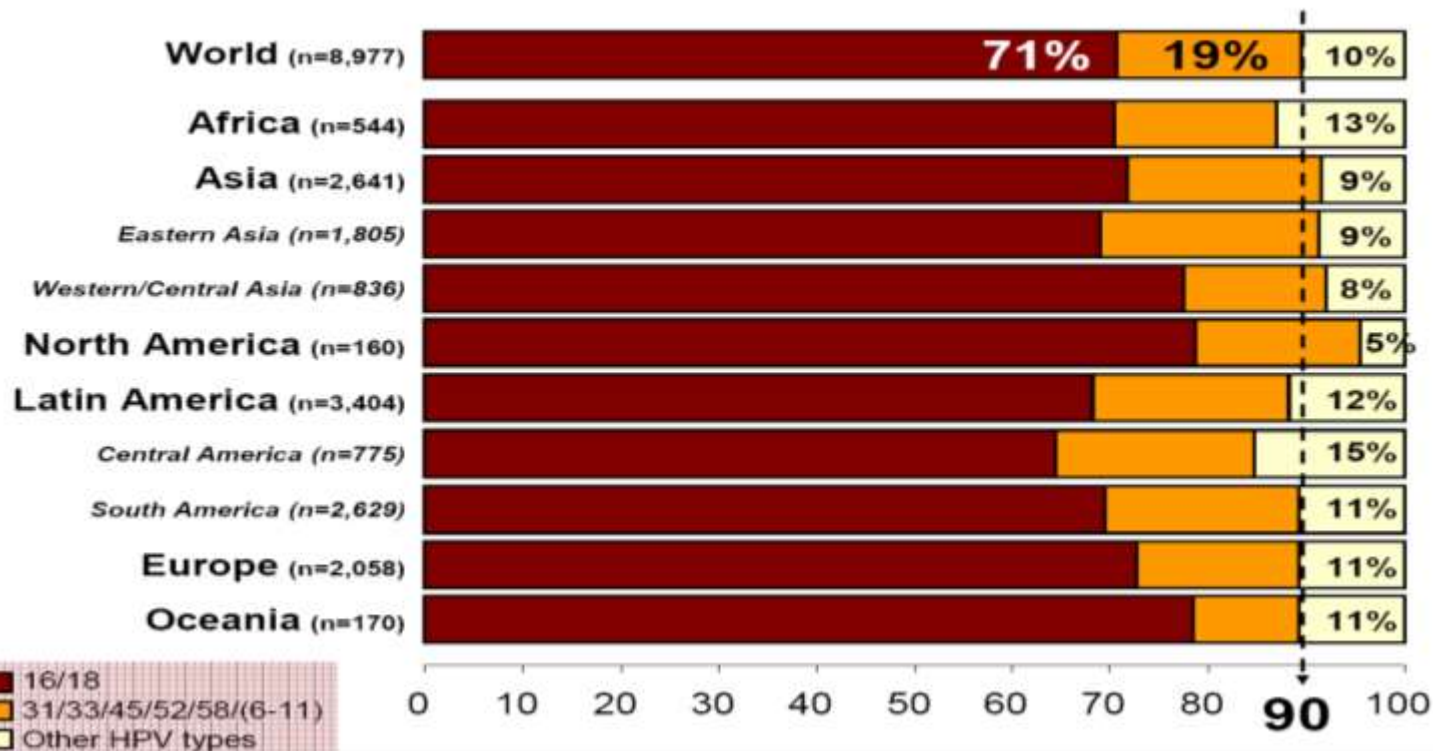
Unit of Infections and Cancer, Catalan Institute of Oncology, Barcelona, Spain



## GEOGRAPHICAL REPRESENTATION OF ICC CASES INCLUDED 38 COUNTRIES



## Relative contribution (%) of 9 vaccine types and non-vaccine types by region



# Σύνθεση των HPV Εμβολίων<sup>α</sup> (MSD)

## GARDASIL<sup>®</sup>

Εμβόλιο Ιού Ανθρώπινων  
Θηλωμάτων [Τύποι 6, 11,  
16, 18] (Ανασυνδρασμένο,  
απορροφούμενο)<sup>1</sup>

AAHS  
225 μg

6

20 μg

11

40 μg

16

40 μg

18

20 μg

## GARDASIL<sup>®</sup>9

9δύναμο Εμβόλιο Ιού Ανθρώπινων Θηλωμάτων (Ανασυνδρασμένο, απορροφούμενο)<sup>2</sup>

AAHS  
500 μg

6

30 μg

11

40 μg

16

60 μg

18

40 μg

31

20 μg

33

20 μg

45

20 μg

52

20 μg

58

20 μg

<sup>α</sup> Ως υπενθύμιση για την υπόλοιπη παρουσίαση, το SILGARD θα αναφέρεται ως εμβόλιο 4νHPV και το GARDASIL 9 θα αναφέρεται ως εμβόλιο 9νHPV.

AAHS= άμορφο θειικό υδροξυφωσφορικό αργίλιο· HPV= ιός ανθρώπινων θηλωμάτων· MSD=Merck Sharp & Dohme Corp.

1. SILGARD [περίληψη χαρακτηριστικών του προϊόντος]. Lyon, France: Sanofi Pasteur MSD SNC; 02/2106. 2. GARDASIL 9 [περίληψη χαρακτηριστικών του προϊόντος]. Lyon, France: Sanofi Pasteur MSD SNC; 05/2016.

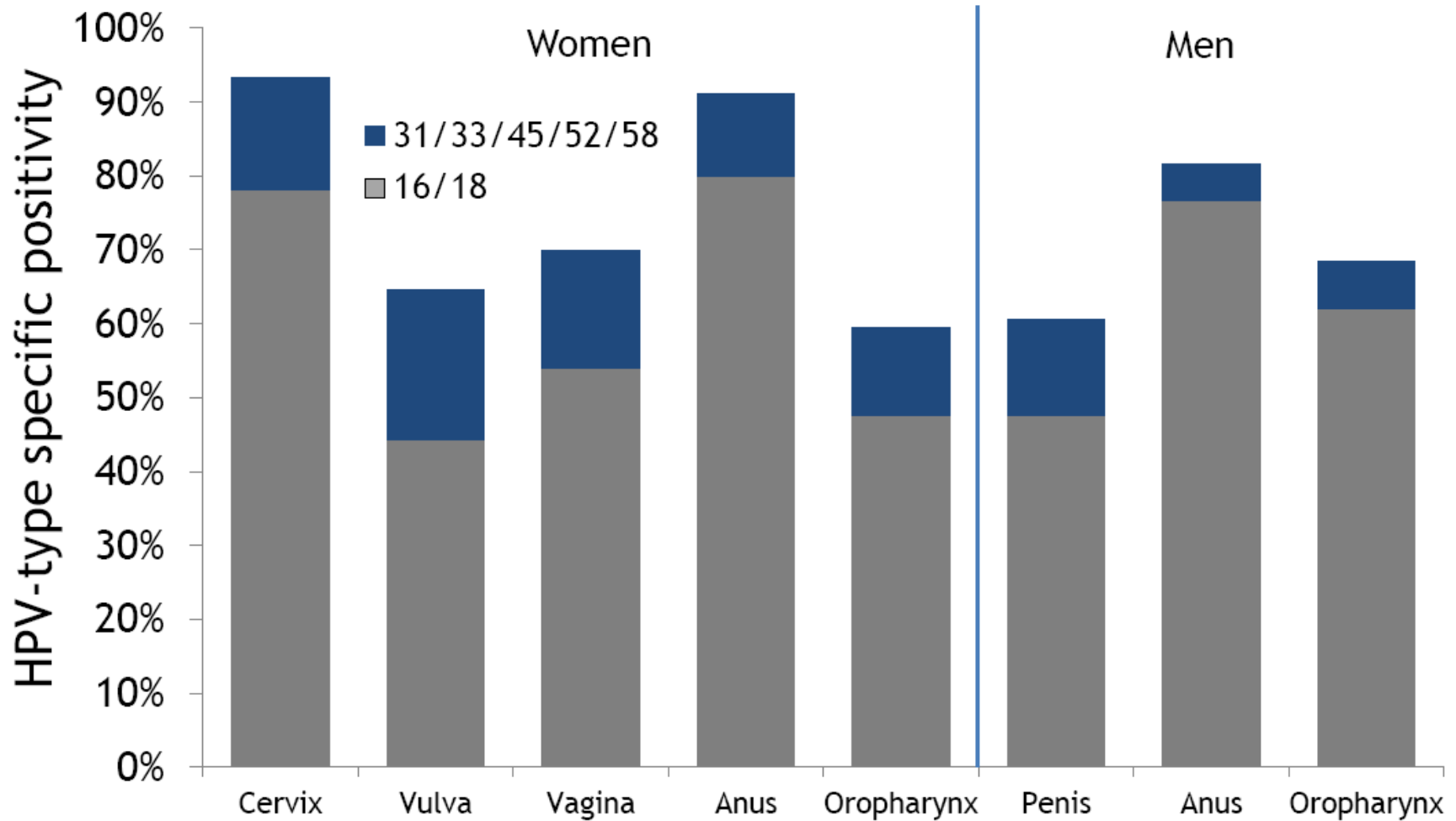
# HPV 31/33/45/52/58 Vaccine Efficacy

## Per-Protocol Efficacy Population- end of study

Endpoint	9vHPV n	qHPV n	Vaccine Efficacy
All CIN	2 / 5949	110 / 5943	<b>98.2%</b> (93.7, 99.7)
> CIN2	1 / 5949	35 / 5943	<b>97.1%</b> (83.5, 99.9)
> CIN3	0 / 5949	7 / 5,943	<b>100%</b> (39.4, 100)
All VIN, VaIN	1 / 6009	18 / 6012	<b>94.4%</b> (67.7, 99.7)
> VIN2/3, VaIN2/3	<b>0 / 6009</b>	3 / 6012	<b>100.0%</b> (-71.5, 100)

# 9-valent HPV vaccine

Potential for additional cancer prevention



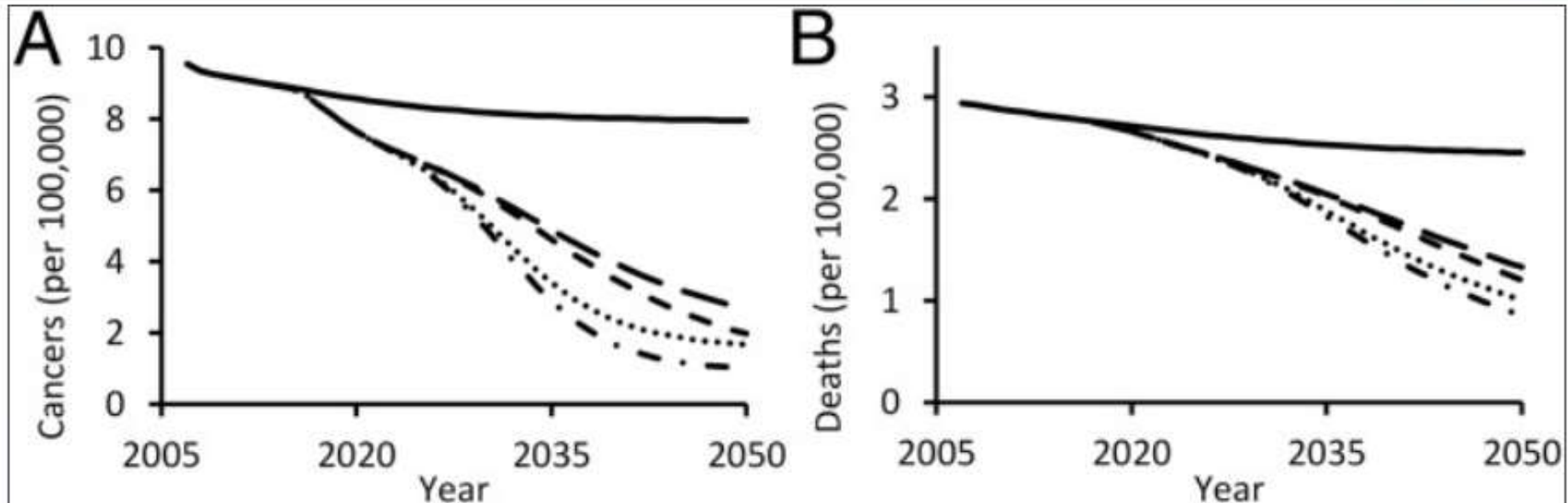


Fig. 2.

Impact through 2050 of no vaccination (solid line), 2vHPV/4vHPV continued at current adolescent coverage (long dashed line), 9vHPV at current coverage (short dashed line), 2vHPV/4vHPV at 100% coverage (dotted line), and 9vHPV at 100% coverage (dashed and dotted line) on annual HPV-associated cervical cancers (A) and annual HPV-associated cervical cancer mortality (B).

[National- and state-level impact and cost-effectiveness of nonavalent HPV vaccination in the United States](#)

Proc Natl Acad Sci U S A. 2016 May 3;113(18):5107-5112.

# ΑΣΦΑΛΕΙΑ του HPV εμβολίου (>270.000.000 δόσεις)

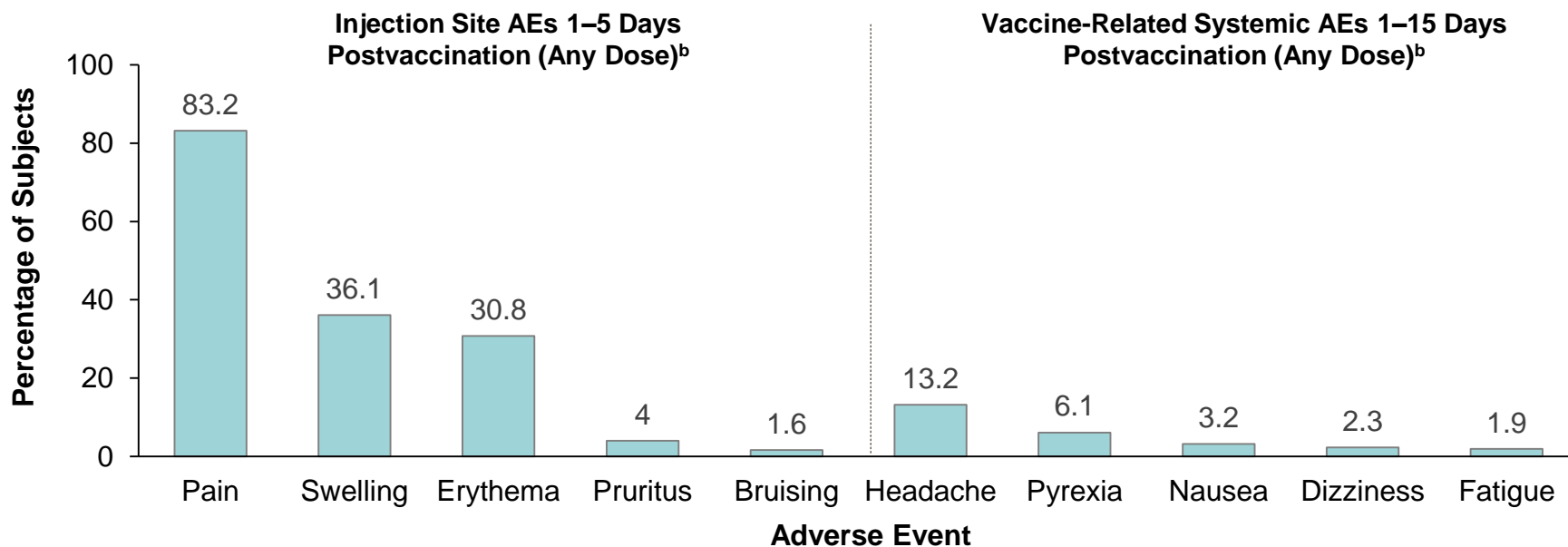
**«Το εμβόλιο εναντίον του HPV είναι ένα ασφαλές και αποτελεσματικό εμβόλιο, με πολύ μεγάλη σπουδαιότητα για την υγεία των γυναικών»**

- Παγκόσμιος Οργανισμός Υγείας (WHO) – 14.07.2017
- Κέντρο Ελέγχου των Παθήσεων ΗΠΑ (CDC)
- Ευρωπαϊκό Κέντρο για την Πρόληψη και Έλεγχο των Παθήσεων (ECDC)
- Ευρωπαϊκό Κέντρο Ελέγχου των Φαρμάκων (EMA)
- Υπηρεσία Τροφίμων και Ποτών ΗΠΑ (FDA)
- Καναδική Υπηρεσία για Φάρμακα & Τεχνολογία στην Υγεία (CADTH)
- Αυστραλιανή Υπηρεσία Θεραπευτικών Προϊόντων (TGA)
- Γερμανική Διαρκούσα Επιτροπή Εμβολιασμών (STIKO)
- Διεθνής Ένωση Μαιευτήρων-Γυναικολόγων (FIGO)
- Ευρωπαϊκή Εταιρεία Γυναικολογικής Ογκολογίας (ESGO)
- .....

# Safety of 9vHPV Vaccine: *Combined analysis of 7 phase III clinical trials in subjects 9 to 26 years of age*

- 7 clinical studies (Protocol 001, 002, 003, 005, 006, 007,009) including 15,776 subjects.<sup>a</sup>
- The most common injection site AE was pain (83.2%) and the most common vaccine-related systemic AE was headache (13.2%).
- Most injection-site reactions were mild to moderate in intensity.

*Injection-Site AEs and Vaccine-Related Systemic AEs Reported at a Frequency of  $\geq 1\%$*



<sup>a</sup>Subjects who received at least 1 dose of 9vHPV vaccine and had safety follow-up. <sup>b</sup>Results are pooled safety data from subjects 9 to 26 years of age who received 9vHPV vaccine in studies Protocol 001, 002, 003, 005, 006, 007, and 009.

# 9vHPV after qHPV

<http://www.cdc.gov/vaccines/acip/>

- Safe
- Immunogenic
- Not cost effective
  - Any vaccination series with bHPV/qHPV might be completed with 9vHPV
  - Full series for protection needed!!!

## Supplemental information and guidance for vaccination providers regarding use of 9-valent HPV vaccine

A 9-valent human papillomavirus (HPV) vaccine (Gardasil 9, Merck & Co., Inc) was licensed for use in females and males in the United States in December 2014.<sup>1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100</sup> 9-valent HPV vaccine is the third HPV vaccine licensed by the Food and Drug Administration (FDA); the other vaccines are bivalent HPV vaccine, licensed for use in females, and quadrivalent HPV vaccine, licensed for use in females and males.<sup>1</sup> In February 2015, the Advisory Committee on Immunization Practices (ACIP) recommended 9-valent HPV vaccine as one of 3 HPV vaccines that can be used for routine vaccination of females and one of 2 HPV vaccines for routine vaccination of males. A Policy Note was published in the MMWR in March 2015.<sup>6</sup> The information below summarizes some of the recommendations included in the Policy Note and provides additional guidance for issues that were not addressed in the Policy Note but are likely to arise during the transition from quadrivalent HPV vaccine to 9-valent HPV vaccine.

### Information about the vaccines

**What are some of the similarities and differences in the characteristics of the three licensed HPV vaccines?**

- Each of the three currently licensed HPV vaccines is a noninfectious, virus-like particle (VLP) vaccine.
- Bivalent, quadrivalent and 9-valent HPV vaccines each target HPV 16 and 18, types that cause about 66% of cervical cancers and the majority of other HPV-associated cancers in both women and men in the United States. 9-valent HPV vaccine also targets five additional cancer causing types (HPV 31, 33, 45, 52, 58) which account for about 15% of cervical cancers. Quadrivalent and 9-valent HPV vaccines also protect against HPV 6 and 11, types that cause anogenital warts.
- Quadrivalent and 9-valent HPV vaccines are licensed for use in females and males; bivalent HPV vaccine is licensed for use in females.

**What percent of HPV-associated cancers in females and males are caused by the 5 additional types in the 9-valent HPV vaccine?**

- About 14% of HPV-associated cancers in females (approximately 2800 cases annually) and 4% of HPV-associated cancers in males (approximately 550 cases annually) are caused by the 5 additional types in the 9-valent HPV vaccine.

### Information for persons who started an HPV vaccination series with quadrivalent or bivalent HPV vaccine

**If a series was started with quadrivalent HPV vaccine or bivalent HPV vaccine, can it be completed with 9-valent HPV vaccine?**

- Yes, ACIP recommendations state that 9-valent HPV vaccine may be used to continue or complete a series started with a different HPV vaccine product.

**Are additional 9-valent HPV vaccine doses recommended for a person who started a series with quadrivalent or bivalent HPV vaccine and completed the series with one or two doses of 9-valent HPV vaccine?**

- There is no ACIP recommendation for additional 9-valent HPV vaccine doses for persons who started the series with quadrivalent or bivalent HPV vaccine and completed the series with 9-valent HPV vaccine.



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Volume 384, No. 9961, p2178–2180, 27 December 2014

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## HPV vaccination: for women of all ages?

Philip E Castle , Kathleen M Schmeler

Published Online: 01 September 2014

 14

DOI: [http://dx.doi.org/10.1016/S0140-6736\(14\)61230-7](http://dx.doi.org/10.1016/S0140-6736(14)61230-7)

# HPV Vaccine Has Long-term Protective Effects in Women Over 25

By Anne Harding

July 12, 2016

- Protection against 6-month persistent HPV infection – for women seronegative at baseline for 16/18 **90.5%**
- Protection against 16/18-associated CIN1+ **96.2%**
- Protection against 6-month HPV 31 persistent infection **65.8%**
- Protection against 6-month HPV 45 persistent infection **70.7%**
- Protection, irrespective of HPV strain, against CIN1+ **22.9%**
- Vaccine efficacy was similar for women 26-35 years old and 36- to 45-year-olds, compared to the overall study population.

# Less Cervical Cancer Screening in HPV-Vaccinated Population?

Kristin Jenkins

October 24, 2016

3 comments



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## EDITORS' RECOMMENDATIONS



**ASCO Issues New Guideline for Global Cervical Cancer**

**Screening**



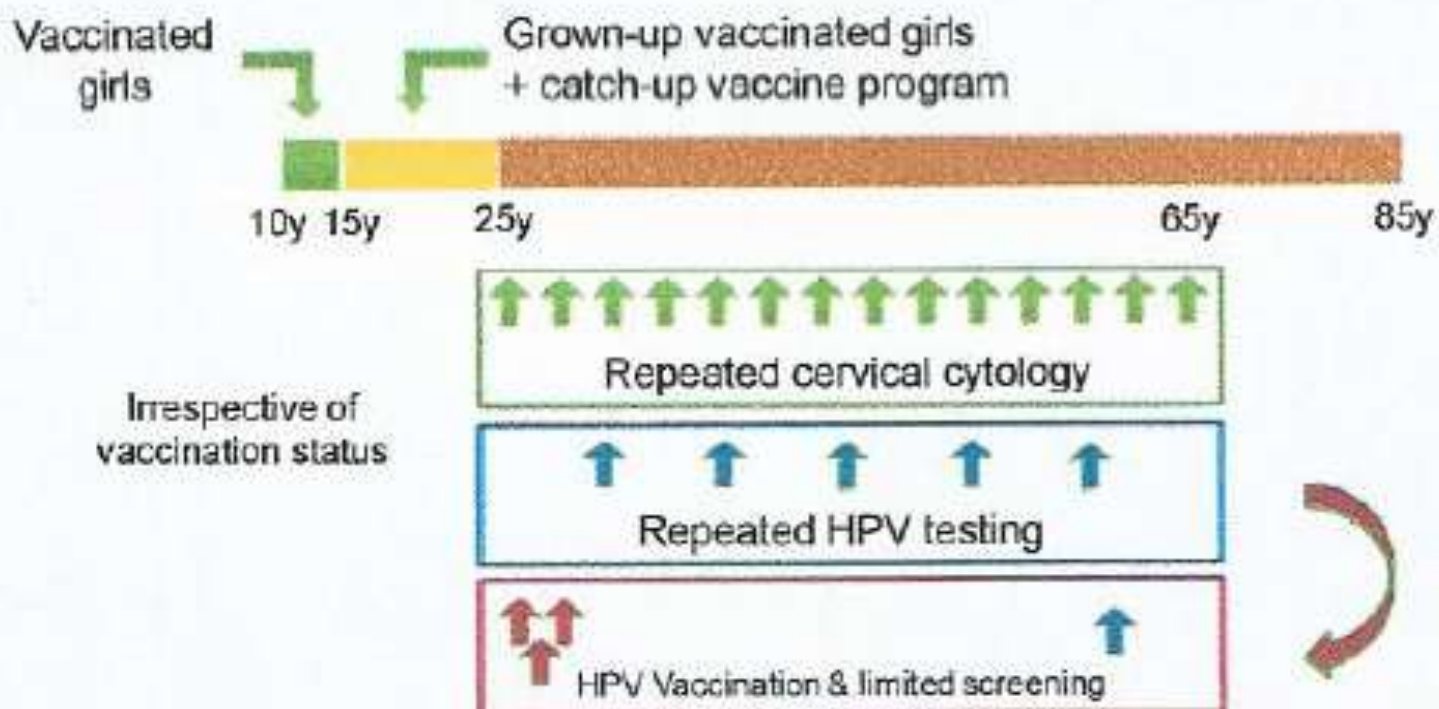
**10-Year Interval for Cervical Cancer Screening Proposed**



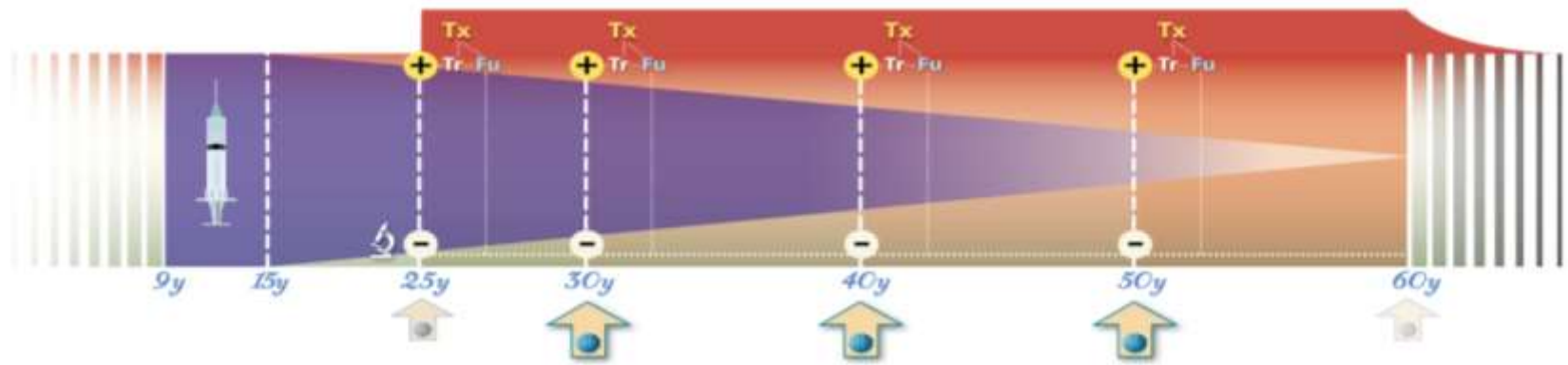
In women who were vaccinated for the human papillomavirus (HPV) at the age of 12 years, cervical cancer screening can start at a later age, take place less frequently, and involve primary HPV testing instead of cytology, suggests analysis of results from a study based on a mathematical microsimulation model.

The model suggests that for women who received the first-generation vaccines active against HPV16 and HPV18, screening could begin at 25 to 30 years of age and be carried out every 5 years. For women who received the more recent HPV-9 vaccine, screening every 10 years would be sufficient.

## Current cervical cancer prevention model: The HPV faster proposal



# FUTURE MODEL OF CERVICAL CANCER PREVENTION



: HPV Vaccination (9v)

: HPV Testing

: Cytology

Tr: Triage

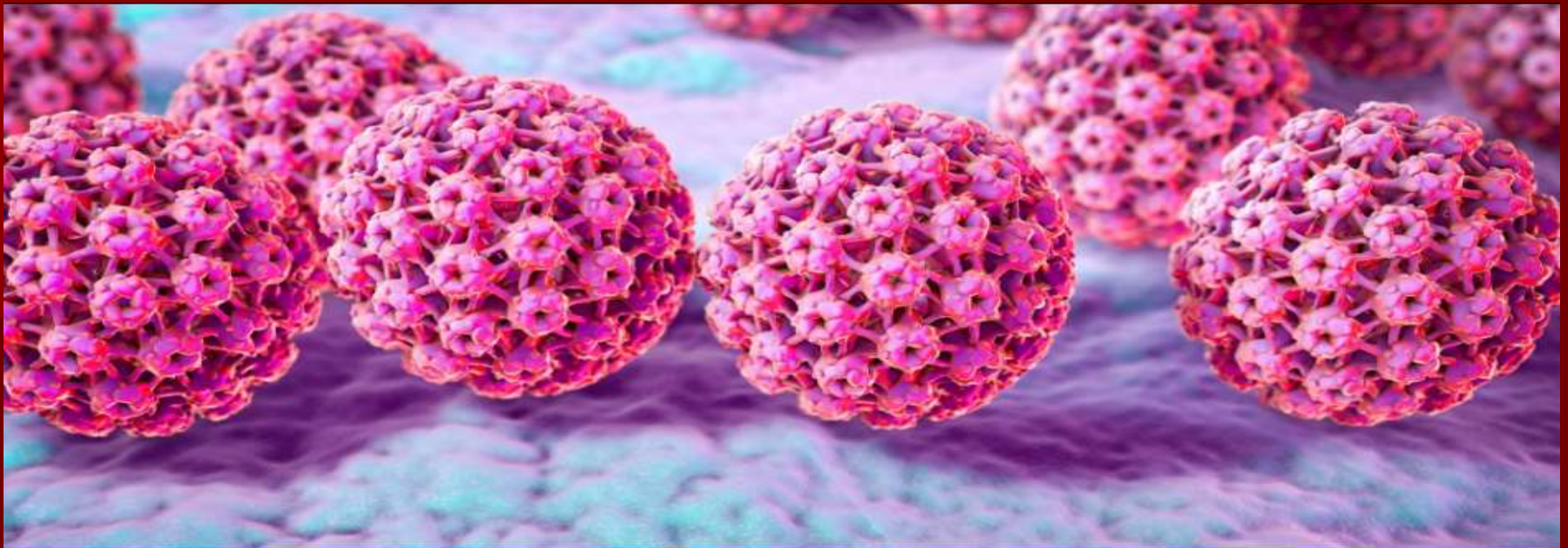
Tx: Treatment

Fu: Follow-up

Kim et al, JNCI, 2017:

## Σε κορίτσια 12 ετών που εμβολιάστηκαν με το εννεαδύναμο HPV εμβόλιο...

- ο κίνδυνος για καρκίνο τραχήλου μήτρας καθ' όλη την διάρκεια της ζωής τους είναι ελαττωμένος κατά **85,3%!**
- **μόνο** στρατηγικές πρόληψης με **HPV testing** είναι αποτελεσματικές!
- **ένα και μόνο HPV test** στην ηλικία των **40 ετών** ελαττώνει τον κίνδυνο αυτόν κατά **91%**, με πολύ καλή σχέση κόστους-οφέλους.
- πληθυσμιακός έλεγχος **κάθε 10 χρόνια**, με **έναρξη σε ηλικία 35 ετών** (δηλ. **4 φορές στην διάρκεια της ζωής**) θα ελαττώσει τον κίνδυνο κατά **98%!**  [παράλληλα θα είναι κάτω από τον ουδό αποδεκτής σχέσης κόστους-οφέλους των \$50,000/QALY (\$40.210/QALY)]
- **μια επί πλέον εξέταση (HPV test)** σε ηλικία των **30 ετών** (δηλ. **5 εξετάσεις στην διάρκεια της ζωής**) ελαττώνει τον κίνδυνο μόνο κατά **1%** (δηλ. **99%!** ) [με πολύ μεγάλη αύξηση του κόστους (\$ 127.010/QALY)].



(dr\_microbes/istock)

## Australia Is Set to Become The First Country to Completely Eliminate One Type of Cancer

The vaccine works.

**F** BRAD JONES, FUTURISM  
7 MAR 2018

The International Papillomavirus Society has announced that Australia could become the first country to eliminate cervical cancer entirely.

According to a new study, Australia's efforts to distribute a human papillomavirus (HPV) vaccine for free in schools have been a resounding success.

The sexually transmitted infection causes 99.9 percent of cases of cervical cancer.

In 2007, the Australian federal government began offering the vaccine to girls aged 12-13, and in 2013 it was made available to boys, too. Girls and boys outside of that age bracket but under nineteen are also entitled to two free doses of the vaccine.

In 2007, the Australian federal government began offering the vaccine to girls aged 12-13, and in 2013 it was made available to boys, too. Girls and boys outside of that age bracket but under nineteen are also entitled to two free doses of the vaccine.

Between 2005 and 2015, the percentage of Australian women aged between 18 and 24 who had HPV dropped from 22.7 percent to just 1.1 percent. Immunization rates have increased further since 2015, contributing to what's being described as a “[herd protection](#)” effect.



Coupled with a [more advanced screening test](#) that was introduced by the Australian government in December 2017, there are hopes that no new cases of cervical cancer will be reported within ten or twenty years.



Cervical cancer

Australia could become first country to eradicate cervical cancer

Free vaccine program in schools leads to big drop in rates, although they remain high in the developing world

Ian Frazer: Eliminating cervical cancer globally is within reach

Naaman Zhou

@naamanzhou

Sat 3 Mar 2018 22.01 GMT



23,444



Australia's free HPV vaccine program in schools has led to a dramatic decline in future cervical cancer rates. Photograph: Voisin/Phanie / Rex Features

Australia could become the first country to eradicate cervical cancer, according to an announcement from the International Papillomavirus Society.

New research, published on Sunday, reveals that Australia's free HPV vaccine program in schools has led to a dramatic decline in future cervical cancer rates.

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# HPV Vaccine Reduces Anal Cancer Risk in Men

By Live Science Staff | October 26, 2011 04:59pm ET

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Vaccine needle  
Credit: Dreamstime

The human papilloma virus (HPV) vaccine prevents anal cancer in young men, a new study says.

Vaccinated men and boys in the study had a 75 percent reduced risk of [anal cancer](#). Participants in the study were men who have sex with men a group at particularly high risk for the disease.

Evidence-Based Oncology > July 2017 - Published on: July 19, 2017

## HPV Vaccination May Lower Prevalence of Oropharyngeal Cancers in Young Adults

Surabhi Dangl-Garimella, PhD

The incidence of human papilloma virus (HPV)-positive oropharyngeal cancer can be reduced with a prophylactic vaccine, according to a collaborative study that was presented at the 2017 American Society of Clinical Oncology Annual Meeting in Chicago.

**ONE OF THE FASTEST GROWING CANCERS** among young men in the United States, the incidence of human papilloma virus (HPV)-positive oropharyngeal cancer can be reduced with a prophylactic vaccine. These are the findings of a collaborative study that was presented at the 2017 American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago.

### BUSINESS LEADERS

## Australia First to Give Gardasil Vaccine to Teen Boys

Australia becomes the first country in the world to provide the HPV vaccine to teenage boys through a \$21 million program

TAGS: australia, boys, gardasil, health, healthcare, HPV, human papilloma virus, ian haxer, Tanya Pitmanek, teen, teenage, university of queensland, vaccine



## NIH NATIONAL CANCER INSTITUTE

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## HPV Vaccination Linked to Decreased Oral HPV Infections

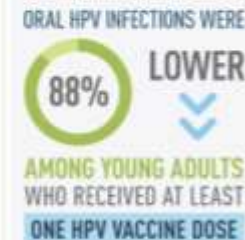
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June 5, 2017, by NCI Staff

New study results suggest that vaccination against the human papillomavirus (HPV) may sharply reduce oral HPV infections that are a major risk factor for oropharyngeal cancer, a type of head and neck cancer.

The study of more than 2,500 young adults in the United States found that the prevalence of oral infection with four HPV types, including two high-risk, or cancer-causing, types, was 88% lower in those who reported receiving at least one dose of an HPV vaccine than in those who said they were not vaccinated.

About 70% of oropharyngeal cancers are caused by high-risk HPV infection, and the incidence of HPV-positive oropharyngeal cancer has been increasing in the United States in recent decades. In the United States, more than half of oropharyngeal cancers are linked to a single high-risk HPV type, HPV 16, which is one of the types covered by Food and Drug Administration (FDA)-approved HPV vaccines.

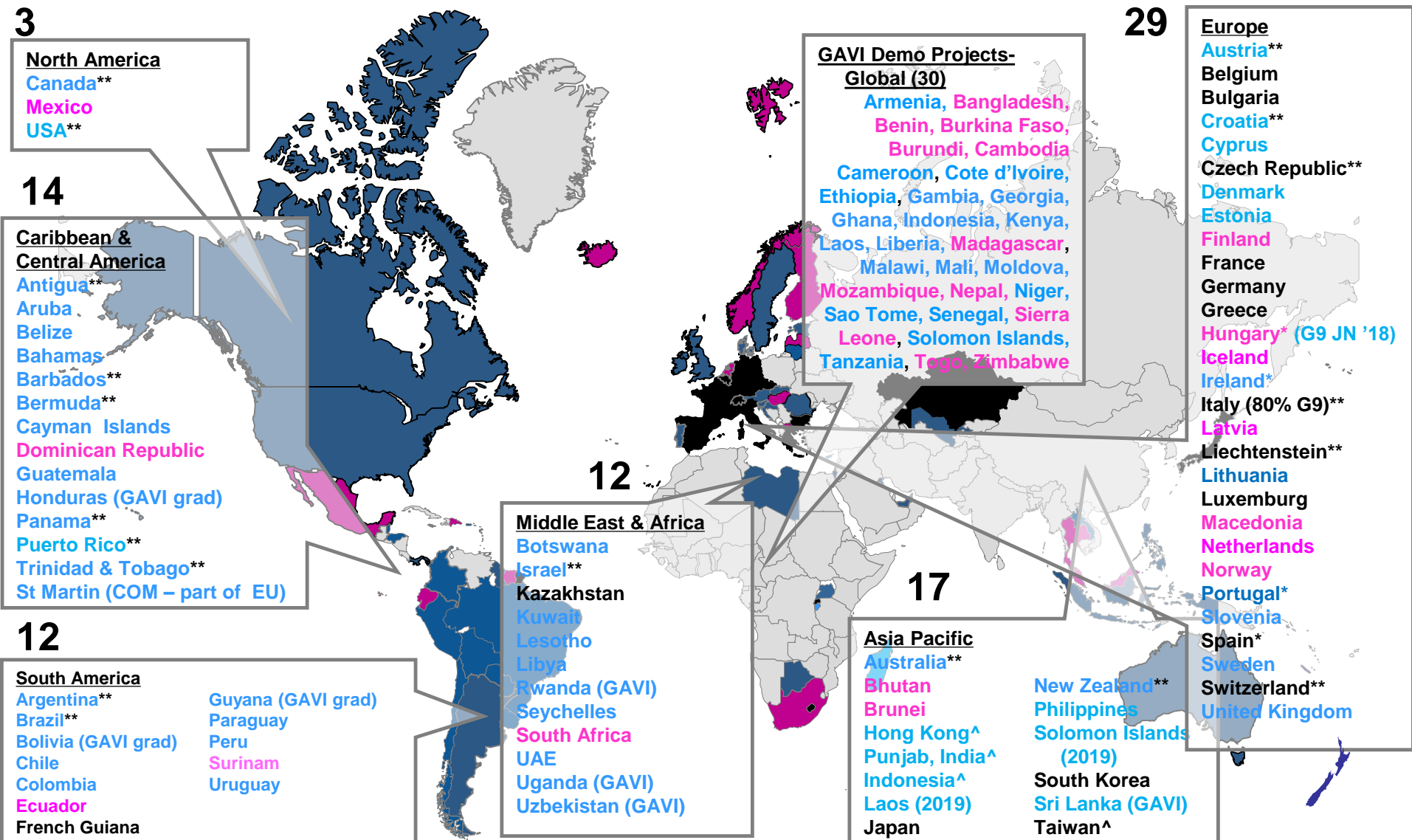


Source: NCI. [View the full story.](#)  
CANCER 3/17

# National Vaccination Programs against HPV: **87 countries** (GAVI countries not included)

**Female only: 68 Countries**

**Gender neutral: 19 countries**



**FUNDING:** 4v/9vHPV Only 2vHPV Only Both vaccines  
 \*Male Recommendation \*\*Male Reco & Funding ^sub-national (<50%)

MSD Data on file,  
 Last update: Feb 5, 2018

# ΕΝΔΕΙΞΕΙΣ ΗΡΝ ΕΜΒΟΛΙΑΣΜΟΥ ΣΤΗΝ ΕΛΛΑΔΑ

## Κορίτσια 11-15ετών:

**2 δόσεις με μεσοδιάστημα 6 μηνών**

## Κορίτσια $\geq 15$ χρ

**3 δόσεις (0, 1-2, 6μ)**

- 3 δόσεις επί ανασοκαταστολής: διαταραχές T και B κυττάρων, HIV λοίμωξη, κακοήθειες, μεταμόσχευση, αυτοάνοσα νοσήματα, ανοσοκατασταλτική αγωγή
- 2 δόσεις σε ασπληνία, δρεπανοκυτταρική νόσο, άσθμα, χρόνια νοσήματα ήπατος, νεφρών πνευμόνων, διαβήτη, καρδιακά νοσήματα, ΧΚΝ, διαταραχές συμπληρώματος,

## Η καθοριστικής σημασίας στάση του Φαρμακοποιού ως προς την τελική απόφαση για HPV-εμβολιασμό

- Ουσιαστική εμπλοκή του φαρμακοποιού στον εμβολιασμό
- Εκπαίδευση του προσωπικού του φαρμακείου
- Συνεργασία μεταξύ γιατρού και φαρμακοποιού
- Συστήματα υπενθύμισης του εμβολιασμού (καμπάνιες ενημέρωσης του κοινού στα φαρμακεία)

# Πρέπει να εμβολιάζουν οι φαρμακοποιοί; Τι ισχύει σε Ευρώπη και ΗΠΑ; (13/2/2018)

Σε μία σειρά από χώρες, υπάρχουν μη συνταγογραφούμενα εμβόλια, όπως της γρίπης ή της κνησμώδους εγκεφαλίτιδας, τα οποία μπορούν να χορηγηθούν από φαρμακοποιούς.

Μεταξύ αυτών, περιλαμβάνονται το Ηνωμένο Βασίλειο, η Ιρλανδία, η Πορτογαλία, οι ΗΠΑ, ο Καναδάς και η Αυστραλία.

Στις συγκεκριμένες χώρες, παρατηρείται αύξηση των ποσοστών εμβολιασμού. Ο αριθμός των Αμερικανών που εμβολιάστηκαν κατά της γρίπης στο φαρμακείο αυξήθηκε περίπου κατά 25% τη διετία 2015 – 2016

# Πλεονεκτήματα των φαρμακείων για να διεκδικήσουν τον εμβολιασμό των ενηλίκων

- Πρώτος και πλέον εύκολος σε πρόσβαση υγειονομικός χώρος
- Άριστος γεωγραφικός καταμερισμός
- Διευρυμένο – ευέλικτο ωράριο λειτουργίας
- Κάλυψη άγονων – υποστελεχομένων περιοχών
- Συνεχής παρουσία φαρμακοποιού

# *Ireland Investigates Cervical Cancer Screening Scandal*



Prime Minister Leo Varadkar said Monday that he was “very angry” and “saddened” by a case involving a publicly funded test program that mistakenly cleared women who later received diagnoses of cervical cancer. *Clodagh Kilcoyne/Reuters*

**By Ed O’Loughlin**

April 30, 2018

DUBLIN — The Irish government announced on Monday that it was opening an official inquiry and setting up phone help lines and emergency testing after it emerged that a publicly funded smear test program had mistakenly cleared at least 208 women who later received diagnoses of cervical cancer.

**Ευχαριστώ πολύ  
για την προσοχή σας!**