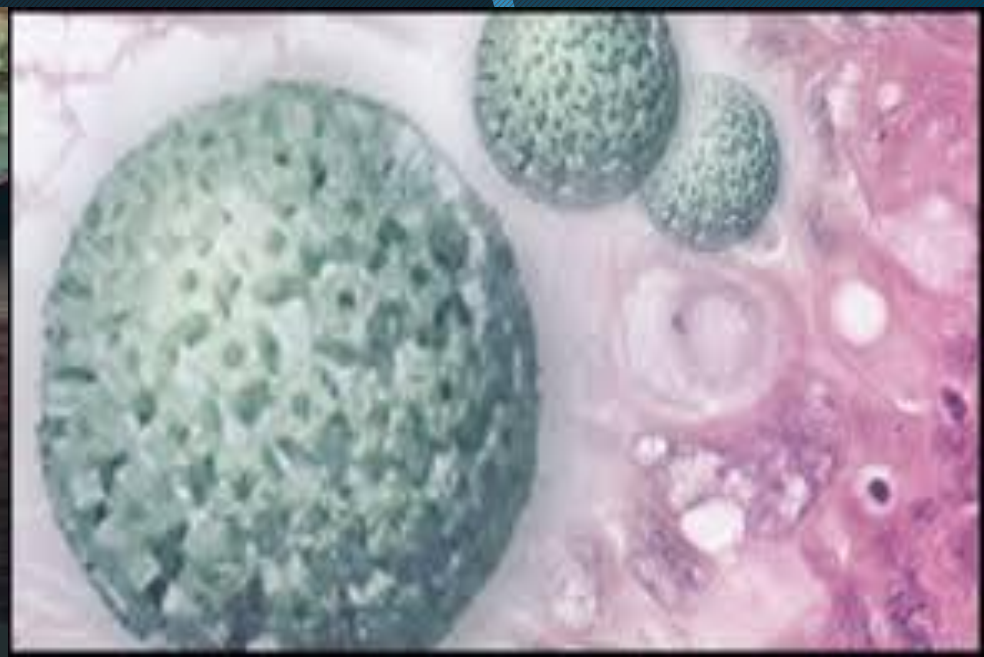
Prof. Dr. dr. Andrijono, SpOG(K)

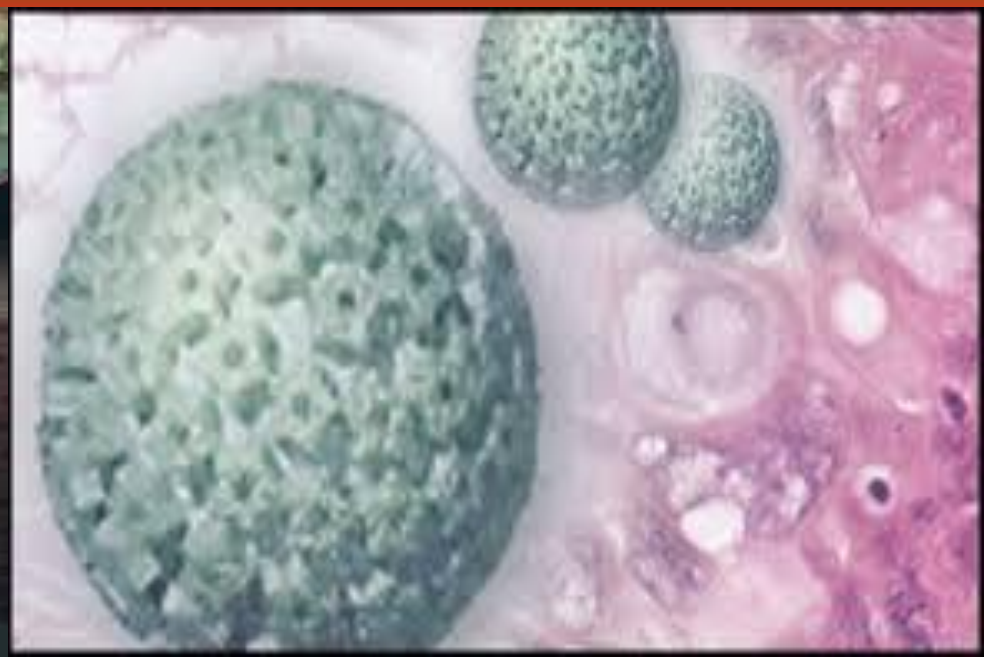
FKUI / RSCM

KETUA HOGI



HPV vaccine is CANCER PREVENTION.

HIMPUNAN ONKOLOGI GINEKOLOGI INDONESIA



New data

RESEARCH PTM

- USIA SAMPLE 25-64 TAHUN
- WAWANCARA 43 490
-SADANIS 38,479
-IVA 36,889
-RESPONS RATE 54.2%
-MARGIN ERROR 13%

PREVALENSI RESPONDEN YG PERNAH

DINYATAKAN KANKER SERVIKS **1,1%**

PERNAH IVA **3,5%**

PREVALENSI IVA POSITIF **7%**

PERNAH PAP SMEAR **7,7%**

ALASAN TDK SKRINING (BELUM PERLU 43,4% ,TAKUT 8,7% , MALU 6%)

JUMLAH SAMPLE : 20 000

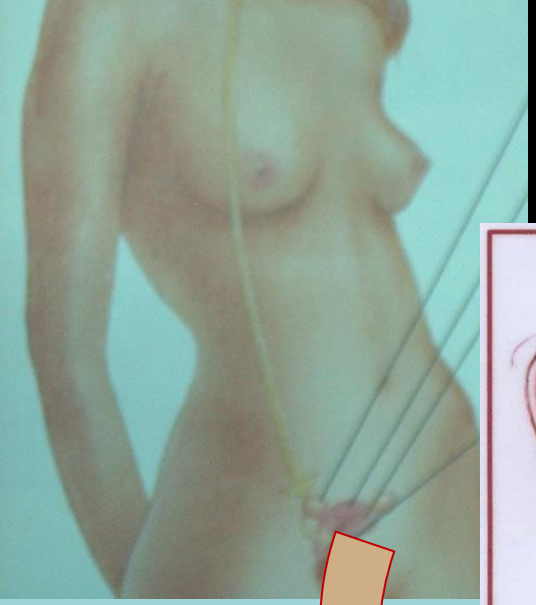
INSIDEN INFEKSI HPV : **5%**

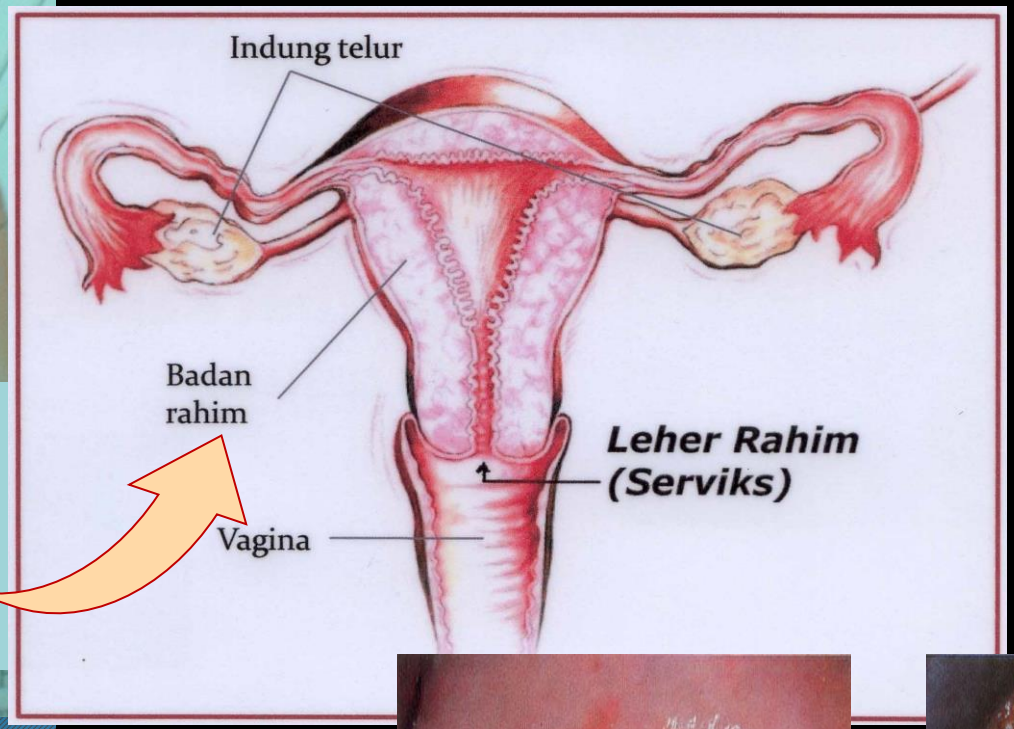
INSIDENS INFEKSI HPV ONKOGENIK :

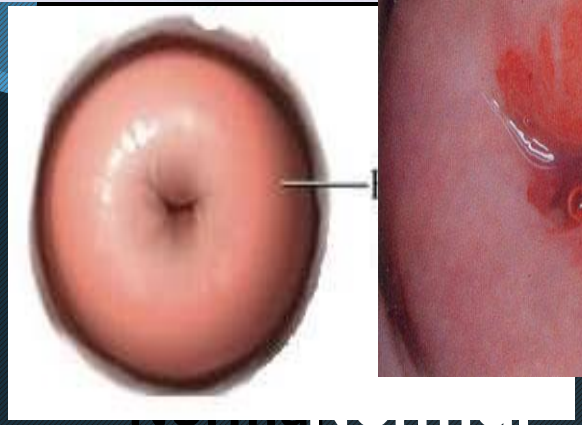
77,2%

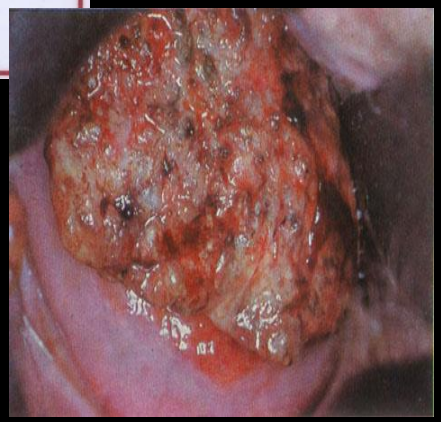
CERVICAL CANCER

Anatomi Serviks









Kanker Serviks

Peran Penelitian

Data

2004 - 2013

Rekapitulasi Pencapaian
FcP FKUI RSCM

FcP FKUI RSCM		Pencapaian 2004 – 2006	Pencapaian 2007 – 2010	Pencapaian 2011 – Okt 2013	Total
Penyuluhan		0	80,991	56,084	**137,075**
Deteksi Dini		8,004	22,989	34,181	**65,174**
IVA Positif / NIS		140	970	498	**1,608**
Krioterapi		217	654	275	**1,146**
Curiga kanker		5	19	63	**87**
Pelatihan	Puskesmas	0	104	132	**236**
	Dokter umum & dokter spesialis	0	641	382	**1,023**
	Bidan & perawat	0	678	447	**1,125**
	Kader	0	660	363	**1,023**
	Tokoh masyarakat	0	287	173	**460**

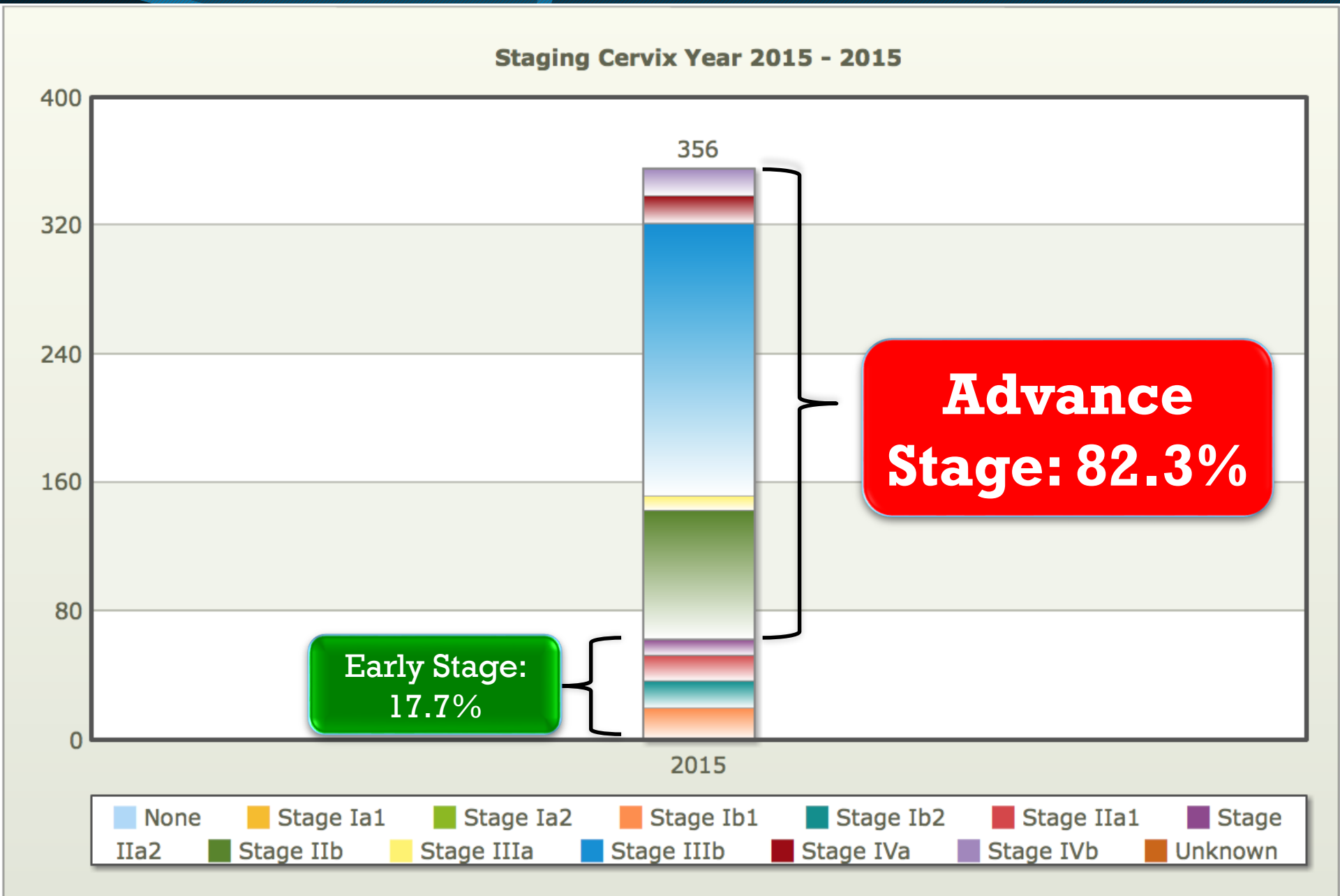
2,47%

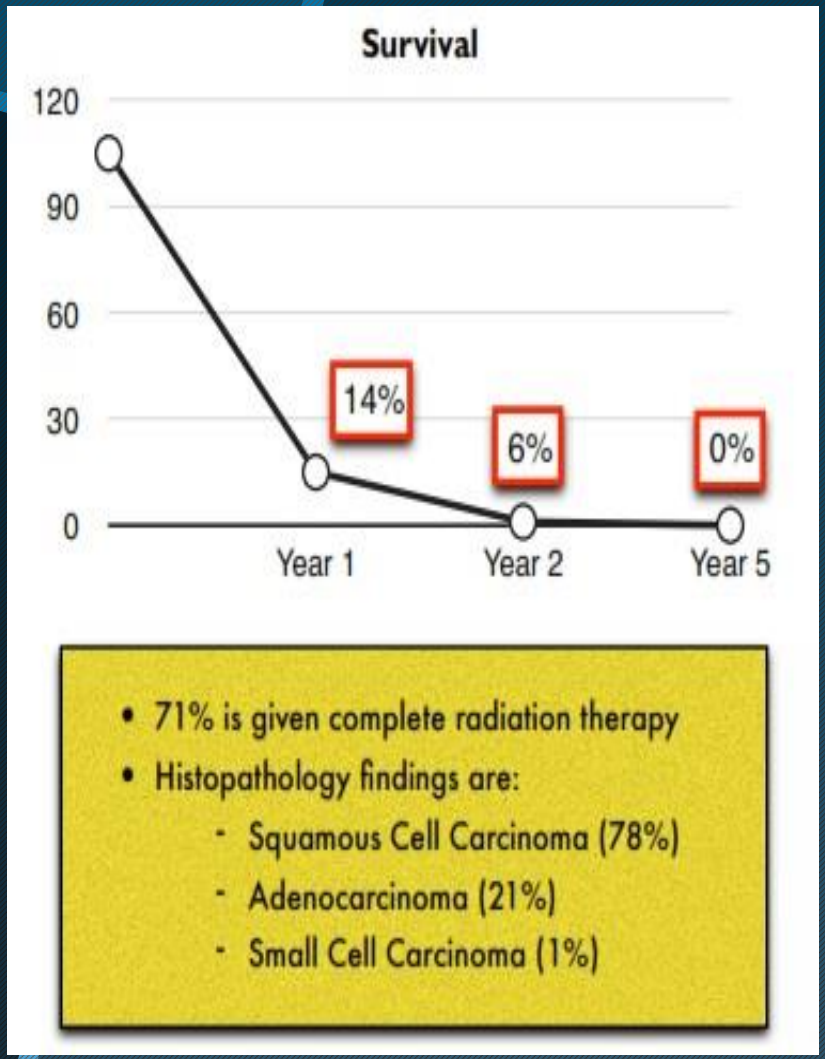
1.3/1000

Dari 342 Puskesmas


58
Kasus baru kanker serviks terjadi setiap hari[1]
26
wanita meninggal setiap hari karena kanker serviks[1]
#1
dengan jumlah kasus kanker serviks terbanyak di Asia Tenggara[2]
SETIAP
1 JAM
WANITA
MENINGGAL
KARENA
KANKER
SERVIKS

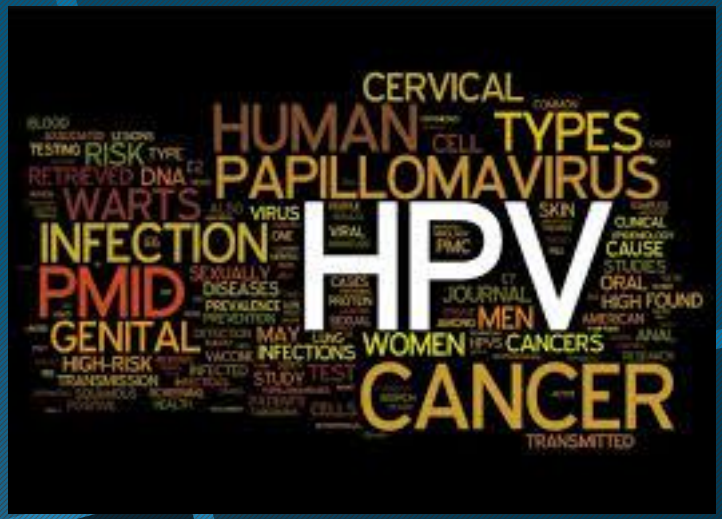
Stadium Ca Cervix Tahun 2015





Kusuma F, Jovian R, Pratiwi R, Purwoto G. Characteristic and survival rate of patient with advanced stage cervical cancer that given adjuvant therapy in cipto mangunkusumo hospital, Jakarta. Poster session presented at: the 4th Biennial meeting of Asian society of gynecologic oncology; 2015 Nov 12-14; South Korea.

HPV
HUMAN PAPILOMA VIRUS

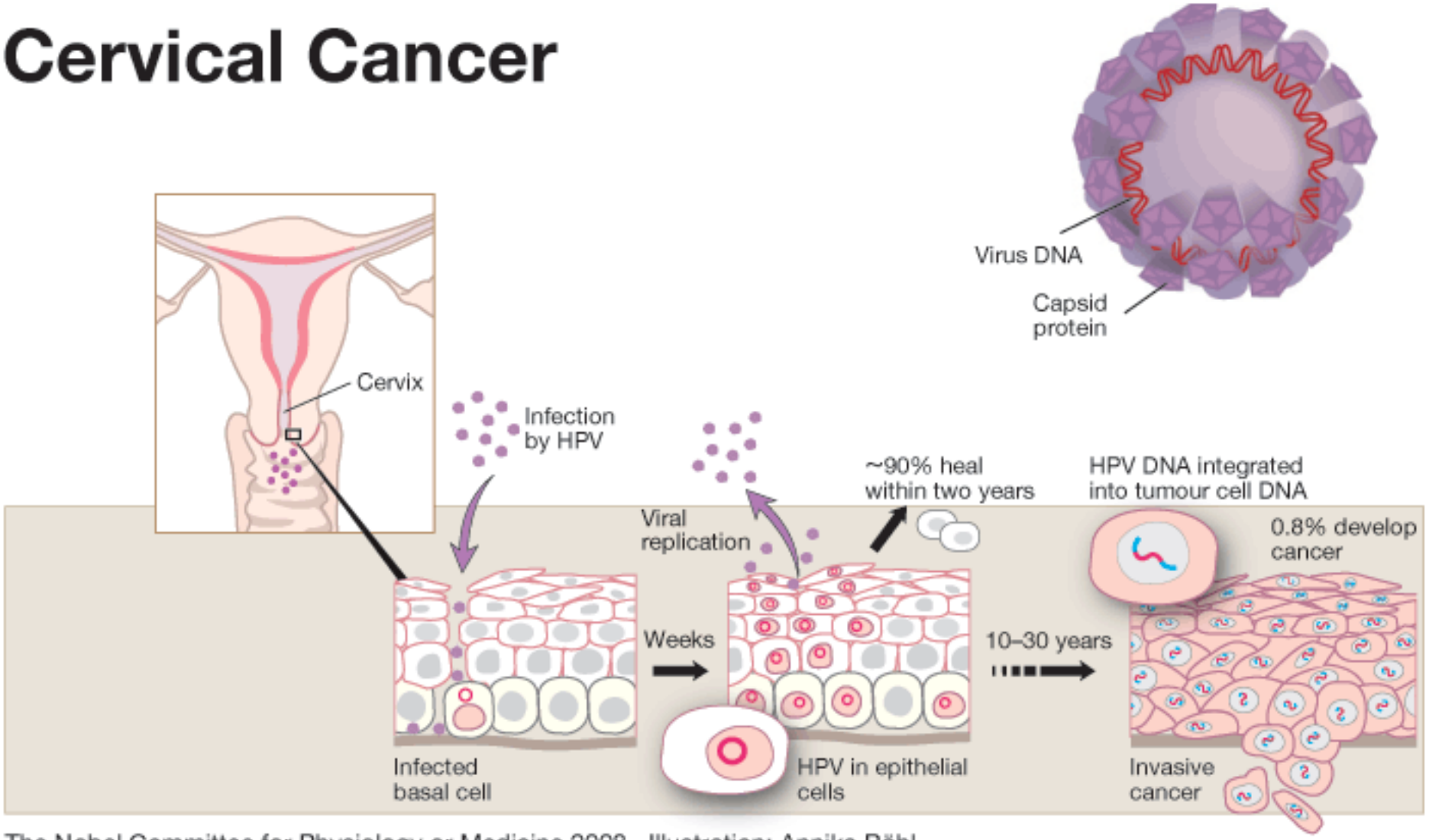


CARCINOGENEIS

PROSES TERJADINYA KANKER

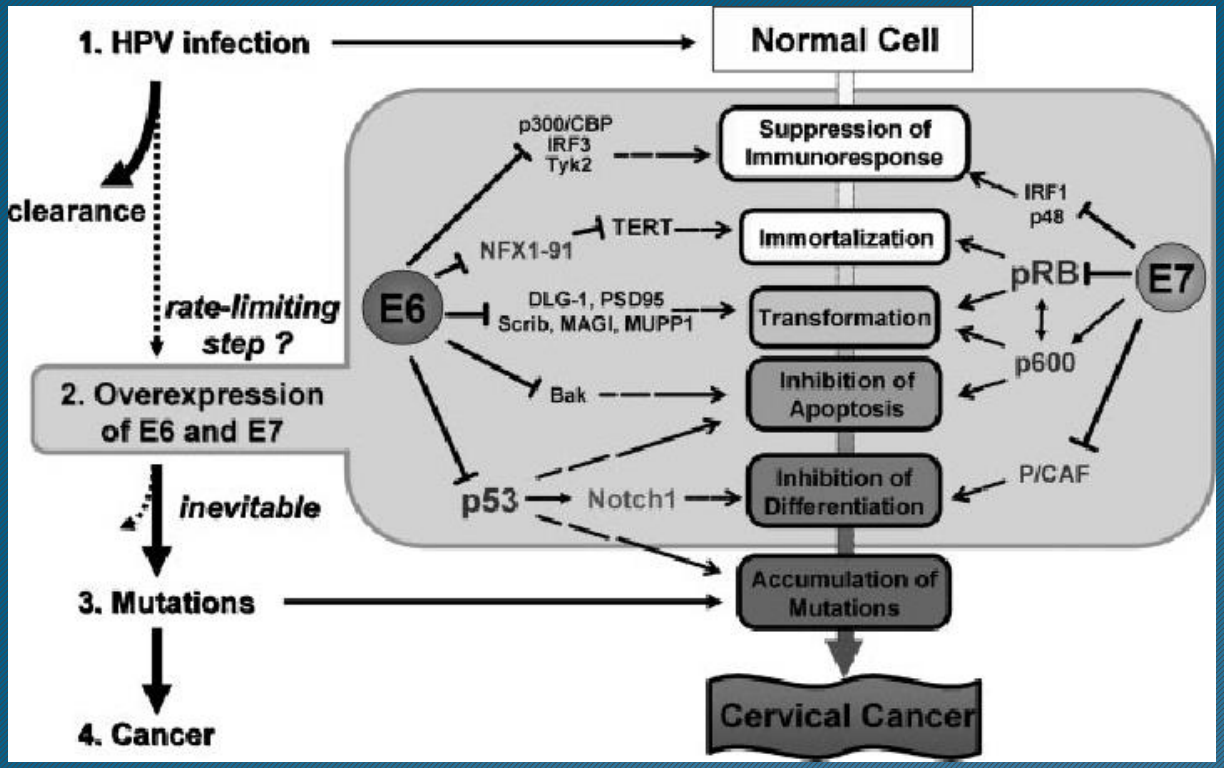
INFEKSI VIRUS HPV TIDAK DIIKUTI GEJALA

Cervical Cancer



The Nobel Committee for Physiology or Medicine 2008 Illustration: Annika Röhl

TERJADINYA KANKER SERVIKS DIAWALI DENGAN INFEKSI VIRUS HPV

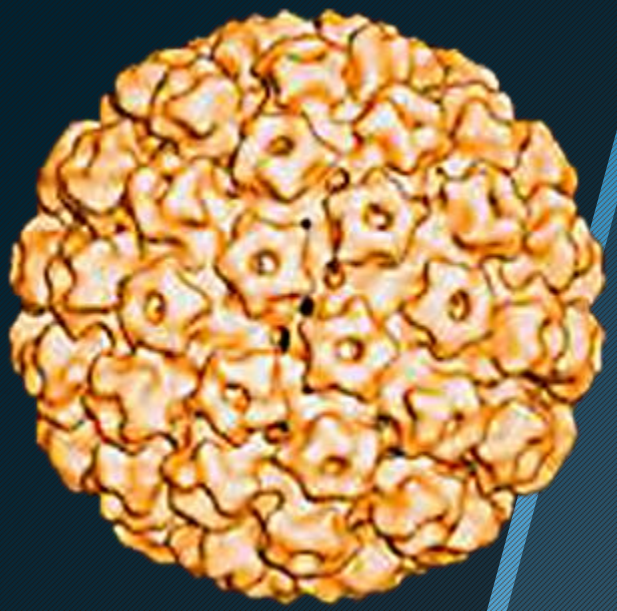


ADA DUA PROTEIN VIRUS HPV YANG BERPERAN UTAMA MENYEBABKAN SEL SERVIKS BERUBAH MENJADI SEL KANKER YAITU PROTEIN E6 DAN E7

EPIDEMIOLOGI

HPV

(Human Papilloma Virus)



>100 type HPV

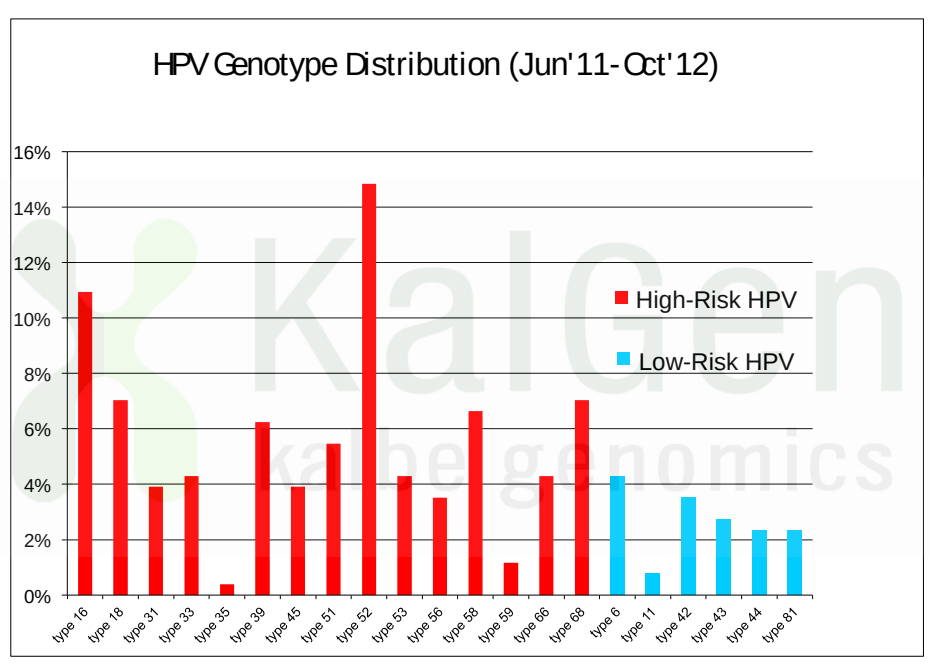
19 oncogenic HPV

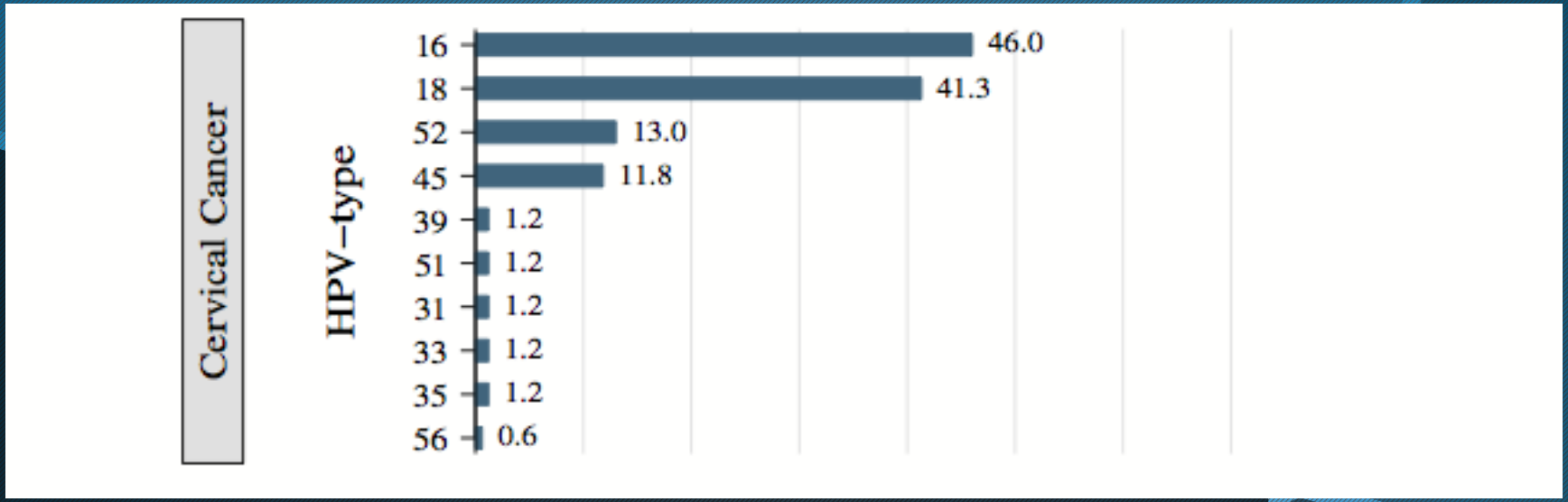
The most common cervical cancer Indonesia

16 (44%), 18 (39%) , 52 (14%).

Maaike C Schellekens etall. Gynecologic Oncology..2004:93(1) ; 49–53

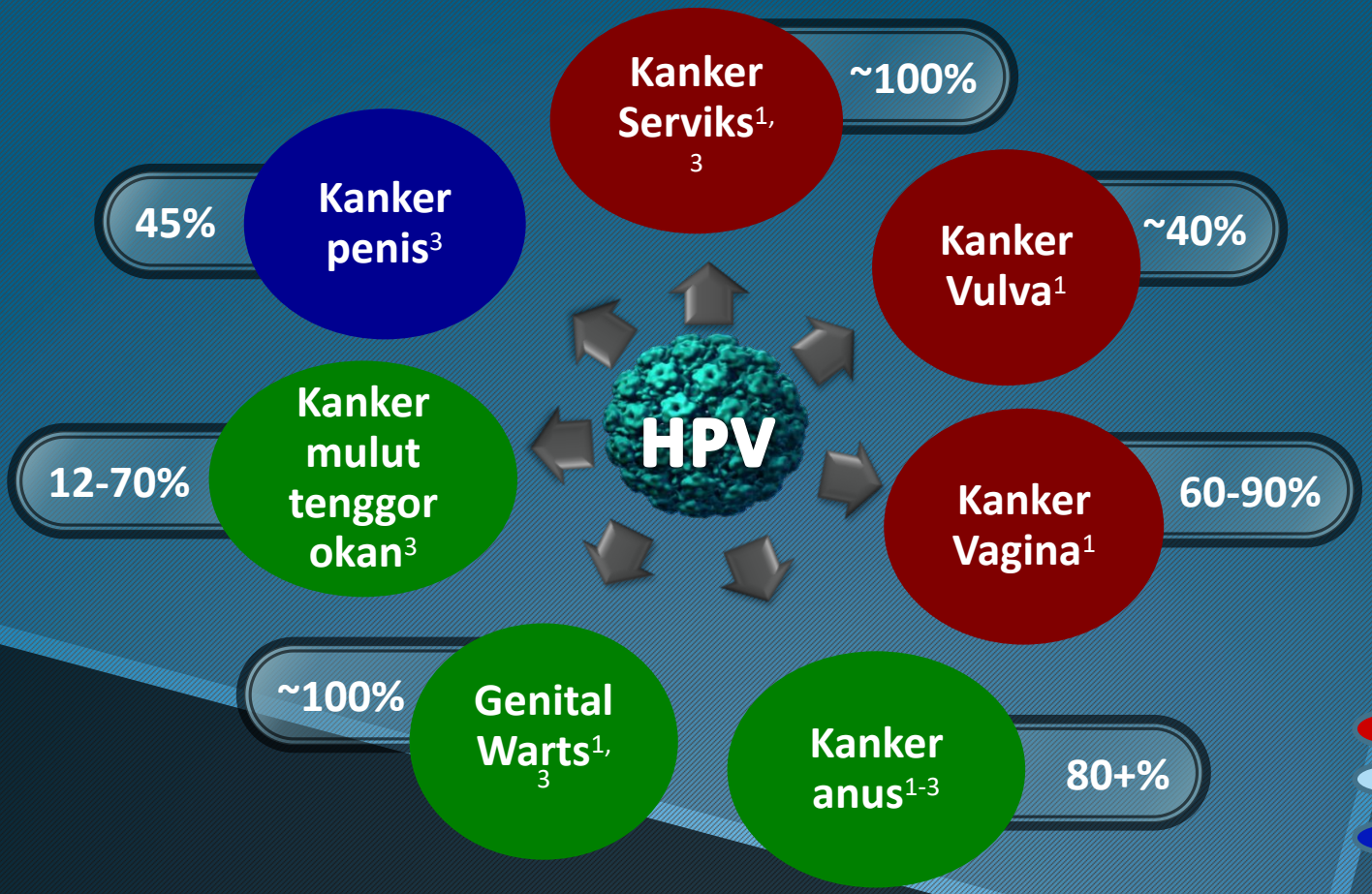
.


HPV Genotype Distribution (Jun'11-Oct'12)
16%
14%
12%
10%
8%
6%
4%
2%
0%
High-Risk HPV
Low-Risk HPV
type 16
type 18
type 31
type 33
type 35
type 39
type 45
type 51
type 52
type 53
type 56
type 58
type 59
type 66
type 68
type 6
type 11
type 42
type 43
type 44
type 81


Cervical Cancer
HPV–type
16 46.0
18 41.3
52 13.0
45 11.8
39 1.2
51 1.2
31 1.2
33 1.2
35 1.2
56 0.6

HPV INFECTION

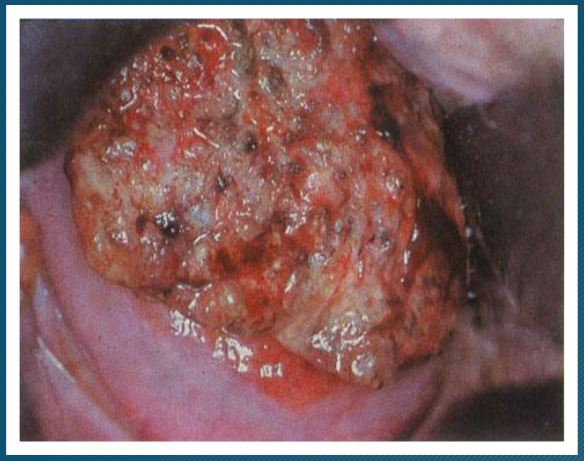
Kanker yang dapat disebabkan HPV



Percentages represent cases atrributable to HPV infection

Braaten KP et al. ***Rev Obstet Gynecol. 2008***;1:2–10.

- Hoots BE et al. ***Int J Cancer. 2009***;124:2375–2383.
- IARC. ***IARC monographs on the evaluation of carcinogenic risks to humans. Human papillomaviruses***. Vol 90. Lyon, France: IARC, 2007.



ADAKAH OBAT HPV

BELUM ADA OBAT INFEKSI HPV

How does HPV get transmitted?

- Sexual contact
  - Sexual intercourse
  - Genital–genital, manual–genital, oral–genital
  - Genital HPV infection in virgins is rare, but may result from nonpenetrative sexual contact.
  - Condom use may help reduce the risk, but not fully protective.
- Nonsexual routes
  - Mother to newborn (vertical transmission)
  - Fomites (e.g., undergarments, surgical gloves, biopsy forceps)
    - Hypothesized but not well documented; would be rare
- Most infected individuals are unaware that they are infected and may unknowingly spread the virus.

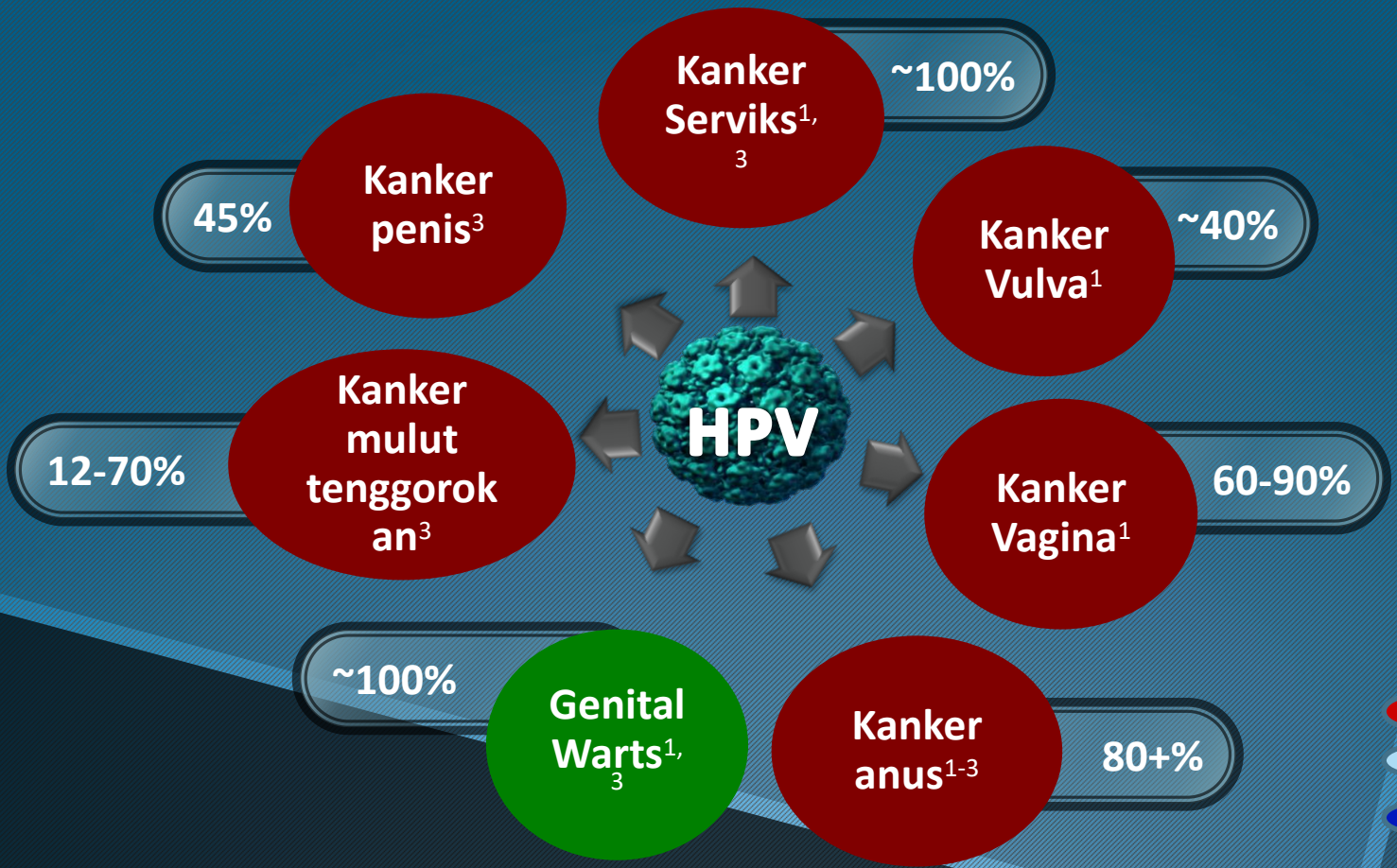
Sexual
Genital-genital
Manual genital
Oral genital
Penularan ibu-bayi

Skin to skin contact

Skin to skin contact

Condoms help, but not completely protective

Kanker yang dapat disebabkan HPV



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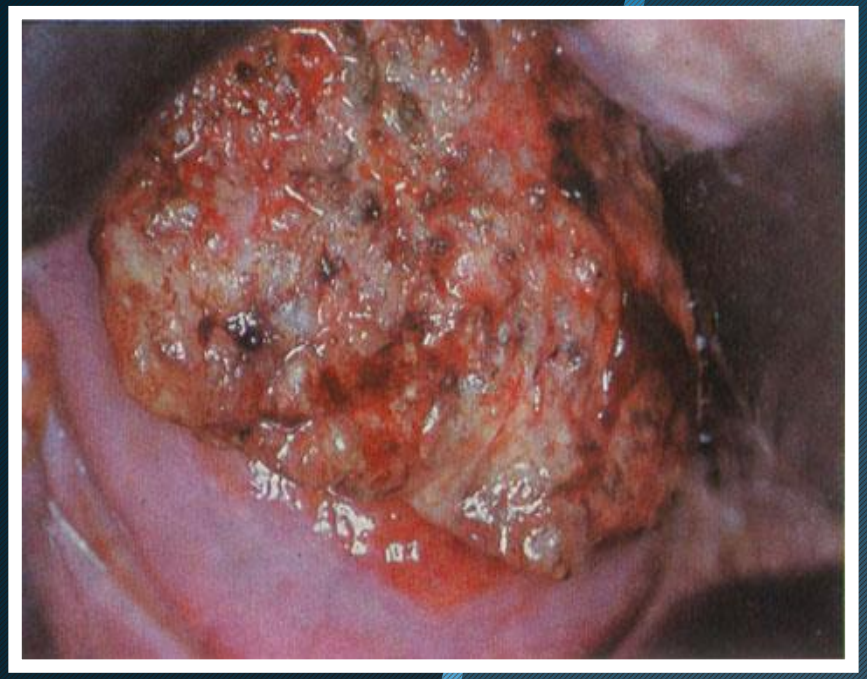
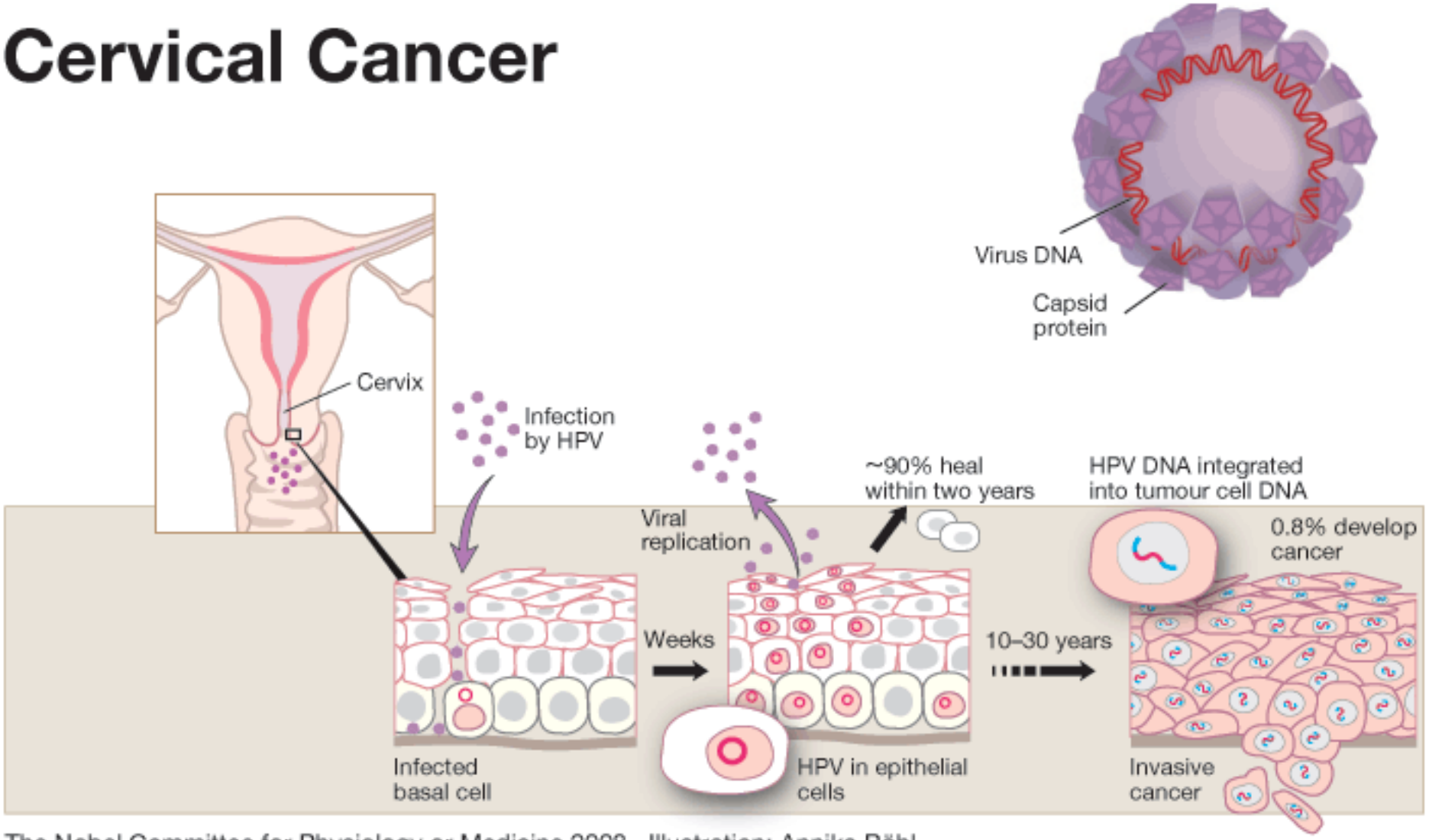
- Hoots BE et al. ***Int J Cancer. 2009***;124:2375–2383.
- IARC. ***IARC monographs on the evaluation of carcinogenic risks to humans. Human papillomaviruses***. Vol 90. Lyon, France: IARC, 2007.

CERVICAL CANCER
GENITAL CANCER



Cervical Cancer



The Nobel Committee for Physiology or Medicine 2008 Illustration: Annika Röhl

TERJADINYA KANKER SERVIKS DIAWALI DENGAN INFEKSI VIRUS HPV

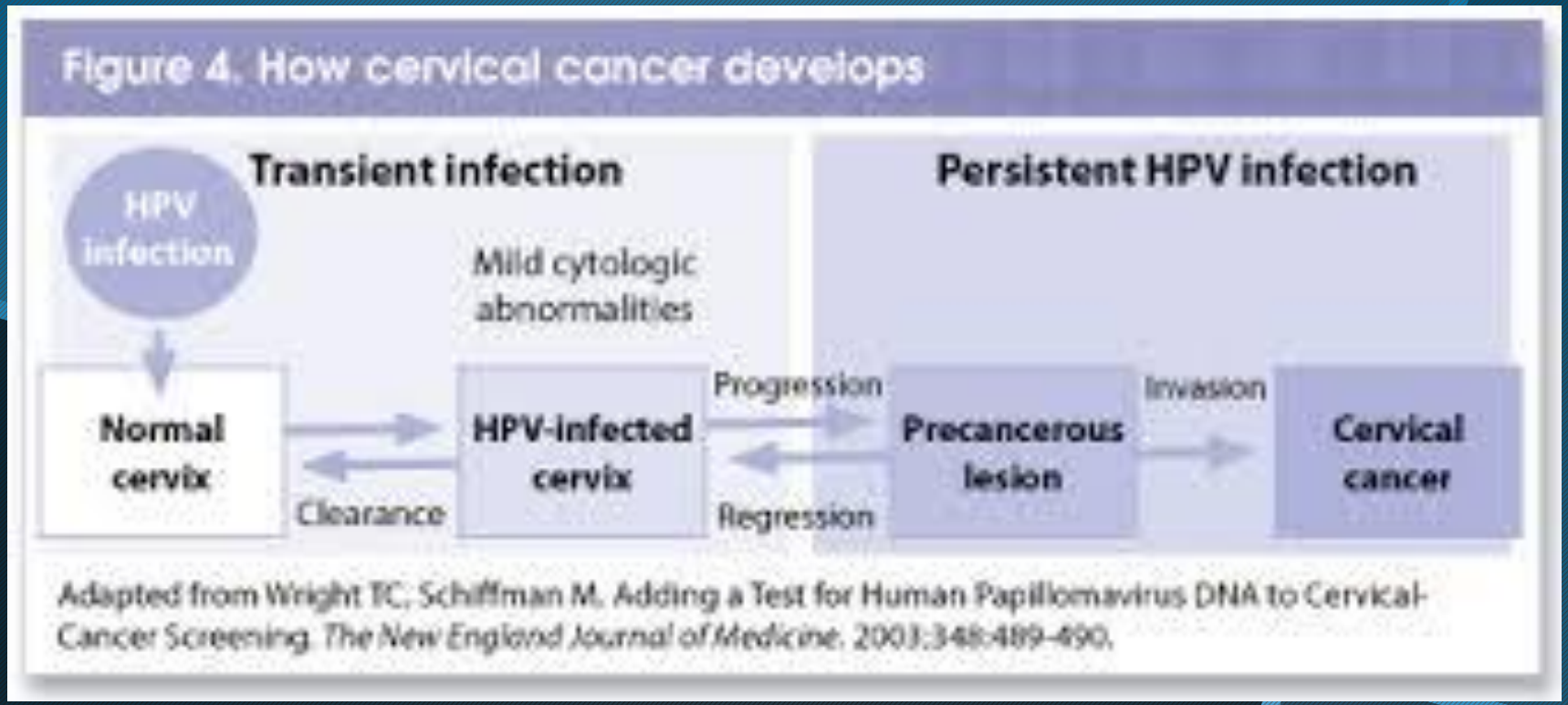
J Pathol. 1999 Sep;189(1):12-9.

Human papillomavirus is a necessary cause of invasive cervical cancer worldwide.

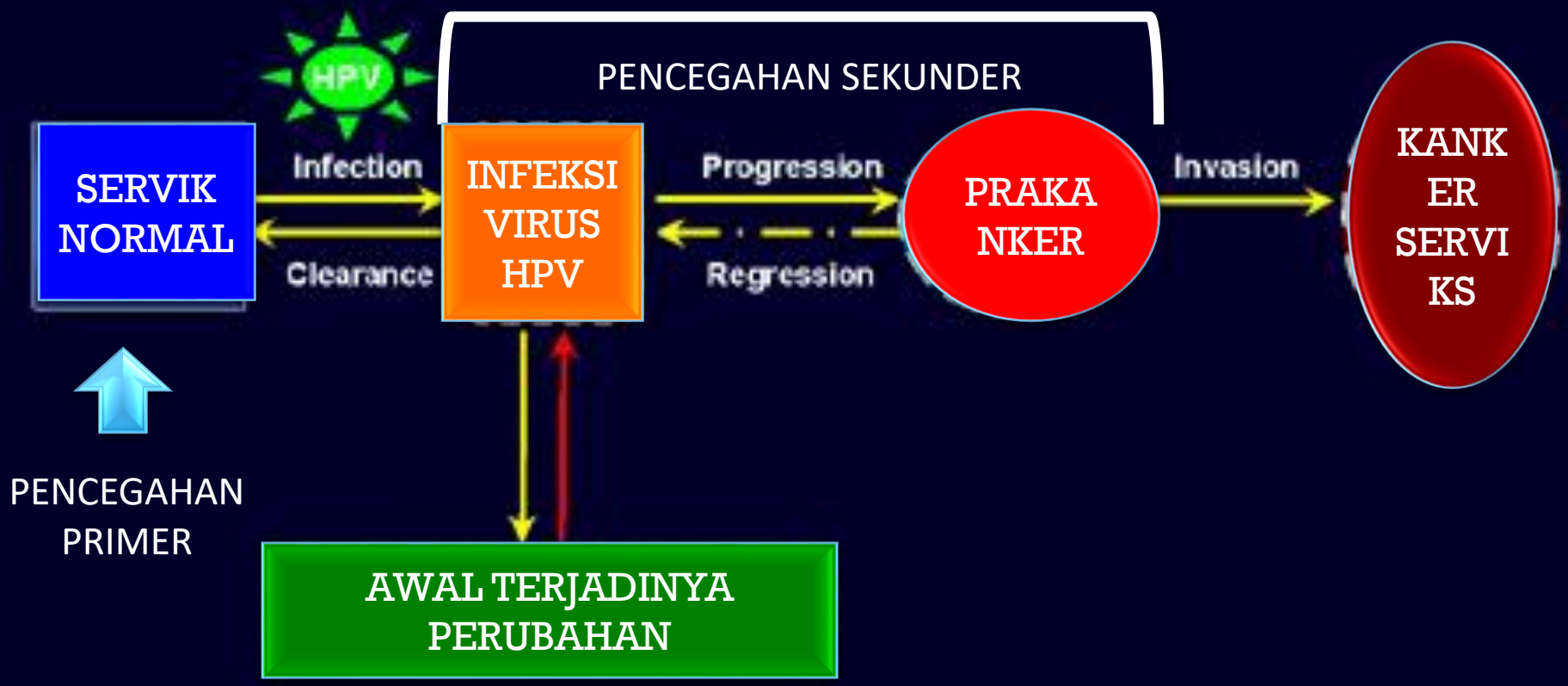
Walboomers JM[1], Jacobs MV, Manos MM, Bosch FX, Kummer JA, Shah KV, Snijders PJ, Peto J, Meijer CJ, Muñoz N.

21 that were inadequate (p< 0.001). Combining the data from this and the previous study and excluding inadequate specimens, the worldwide HPV prevalence in cervical carcinomas is 99.7 per cent. The presence of HPV in virtually all cervical cancers implies the

CERVICAL CANCER - HPV



PERJALANAN PENYAKIT KANKER SERVIKS

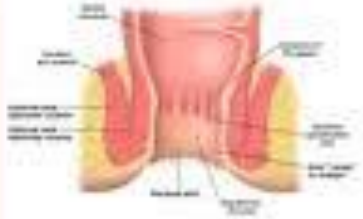


Schiffman M, Kjaer SK. *J Natl Cancer Inst Monogr.* 2003;(31):14-19

Time from HPV infection to death due to Cervical Cancer

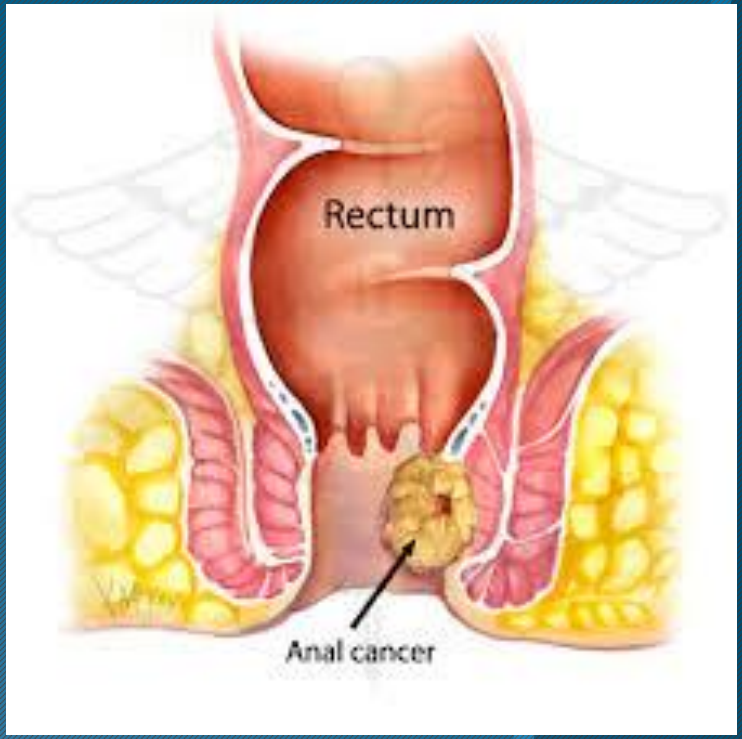
- Time from HPV infection to high grade precancerous dysplasia ranges from 6 months to decades- average 3 years
- Progression from CIN2/CIN3 to invasive cancer takes 5-20 years
- In screened population cervical cancer has been reported before 20 years, gradually increasing to a plateau by early 30 & does not decrease in later life

ANAL CANCER



Anal Cancer

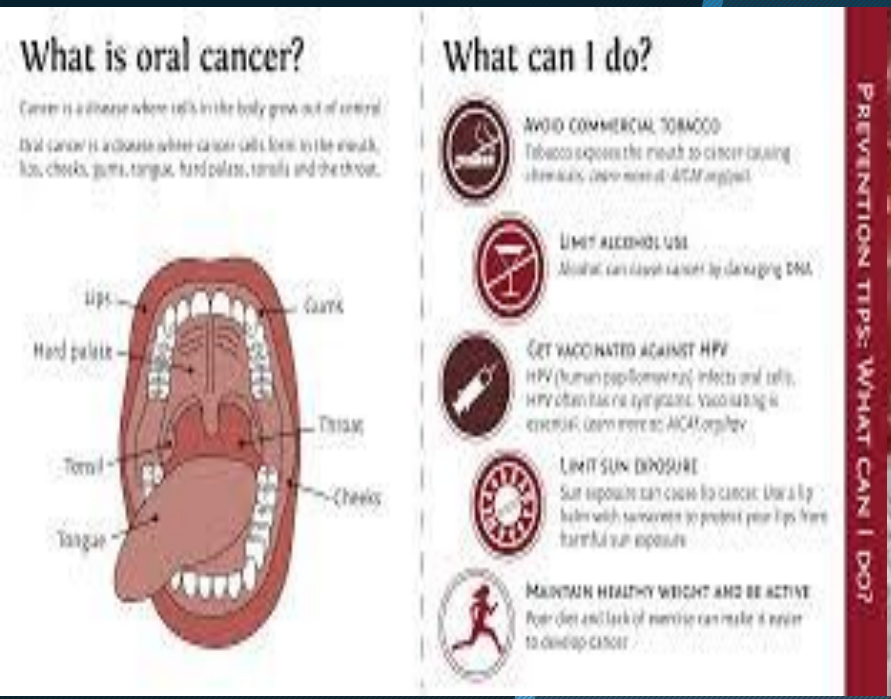
- This is usually squamous cancer (HPV infection) and is treated with chemo-radiation.
- Rectal cancer is adenocarcinoma (from a polyp) and is treated with surgery +/- chemoradiation



Anal Cancer: *Risk Factors*

- High Risk HPV Serotypes
  - HPV-16, HPV-18
  - detected in > 80% of anal cancer specimens
  - CDC: estimates 86-97% of cancers of the anus are attributed to HPV infection
  - Other Oncogenic HPV strains: 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, and 66
- Immunosuppression facilitates persistence of HPV infection
  - HIV+, MSM incidence 131 / 100,000 persons
  - Solid Organ Transplant
  - Anti-TNF Therapy

ORAL CANCER


What is oral cancer?
Lips
Gums
Hard palate
Throat
Tonsil
Cheeks
Tongue
What can I do?
AVOID COMMERCIAL TOBACCO
LIMIT ALCOHOL USE
GET VACCINATED AGAINST HPV
LIMIT SUN EXPOSURE
MAINTAIN HEALTHY WEIGHT AND BE ACTIVE
PREVENTION TIPS: WHAT CAN I DO?

Can I get cancer from oral sex?

Yes, and the U.S. is seeing a sharp increase in the number of cases of oral and throat cancer among men, caused by HPV infections contracted during oral sex.

Can I get cancer from oral sex?

Yes, and the U.S. is seeing a sharp increase in the number of cases of oral and throat cancer especially among young men, caused by HPV infections contracted during oral sex.

Tuesday, September 20, 201

D2 •

REPORT ON HEALTH

The Rising Risk: HPV now a more-common cause of throat and oral cancers than tobacco

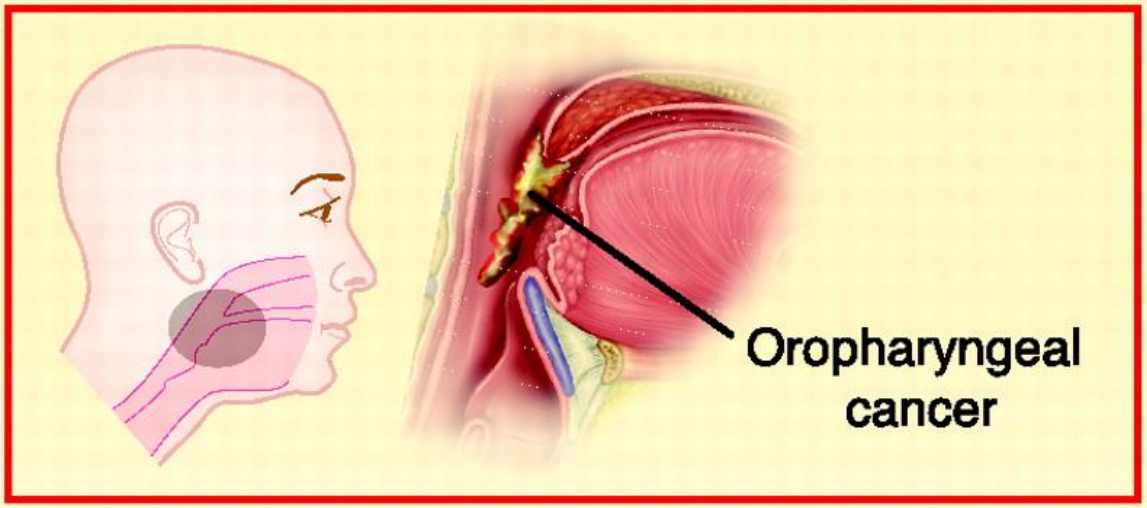
Changing sexual behavior may explain why over the last decade HPV infections have led to a **four- to five-fold increase** in the number of tonsillar and base of tongue cancers, particularly among young men.

Survival rates for mouth and oral cancers are **between 85%-90%**, but oral cancers alone still **kill 8,000 people** in the U.S. every year.

In 2010, the National Cancer Institute estimated there were 12,660 cases of oropharyngeal cancer resulting in **2,410 deaths.** About half of those cases were men and **at least 75% were caused by HPV.**

HPV is a virus. It is the most common sexually transmitted infection, and can be spread through skin-to-skin contact.

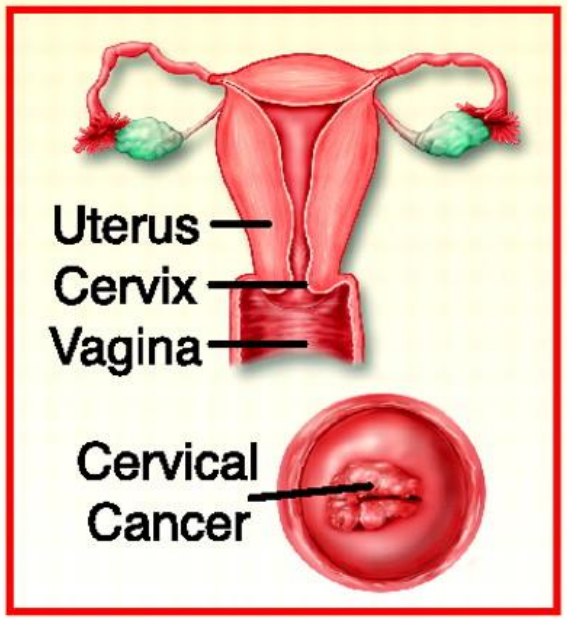
Approved vaccines can help prevent an HPV infection.

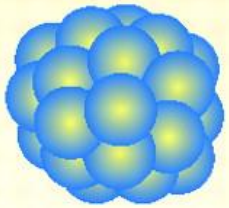


HPV 16, ?

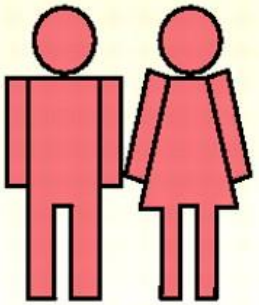
HPV transmission

HPV 16, ?





HPV 16 and 18;
HPV 31, 33, 35, 39, 45, 51, 52, 56, 58,59, 68, 73, 82

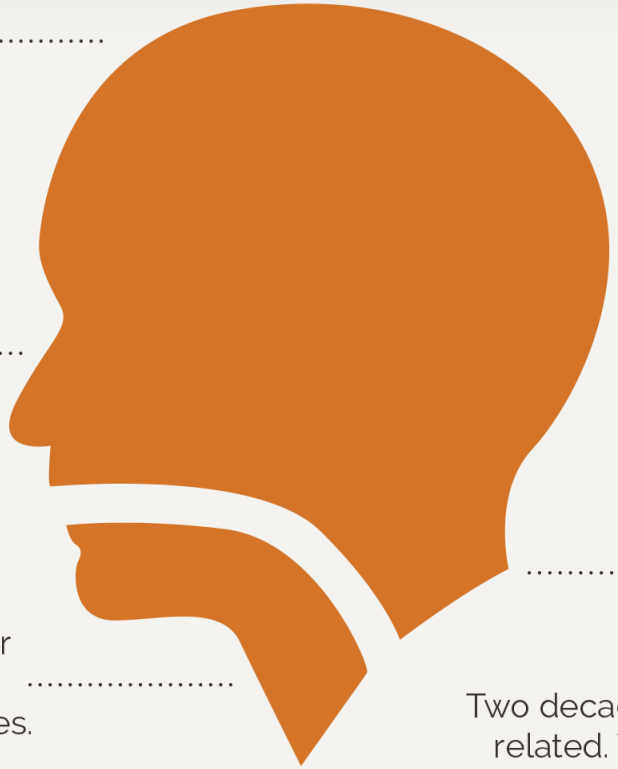


Sexual Contact

FACTS ABOUT **ORAL CANCER**

20x
higher risk of developing a second cancer, after surviving a first.

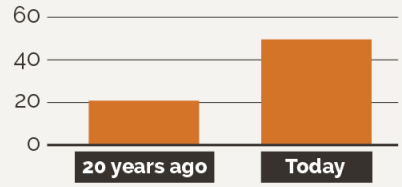
ONE AMERICAN dies every hour from oral cancer.



75% of oral cancer is related to lifestyle choices.

90% of oral cancers are squamous cell carcinomas

Oral cancers have **increased** over a 6 year period, while other cancers have **decreased**.

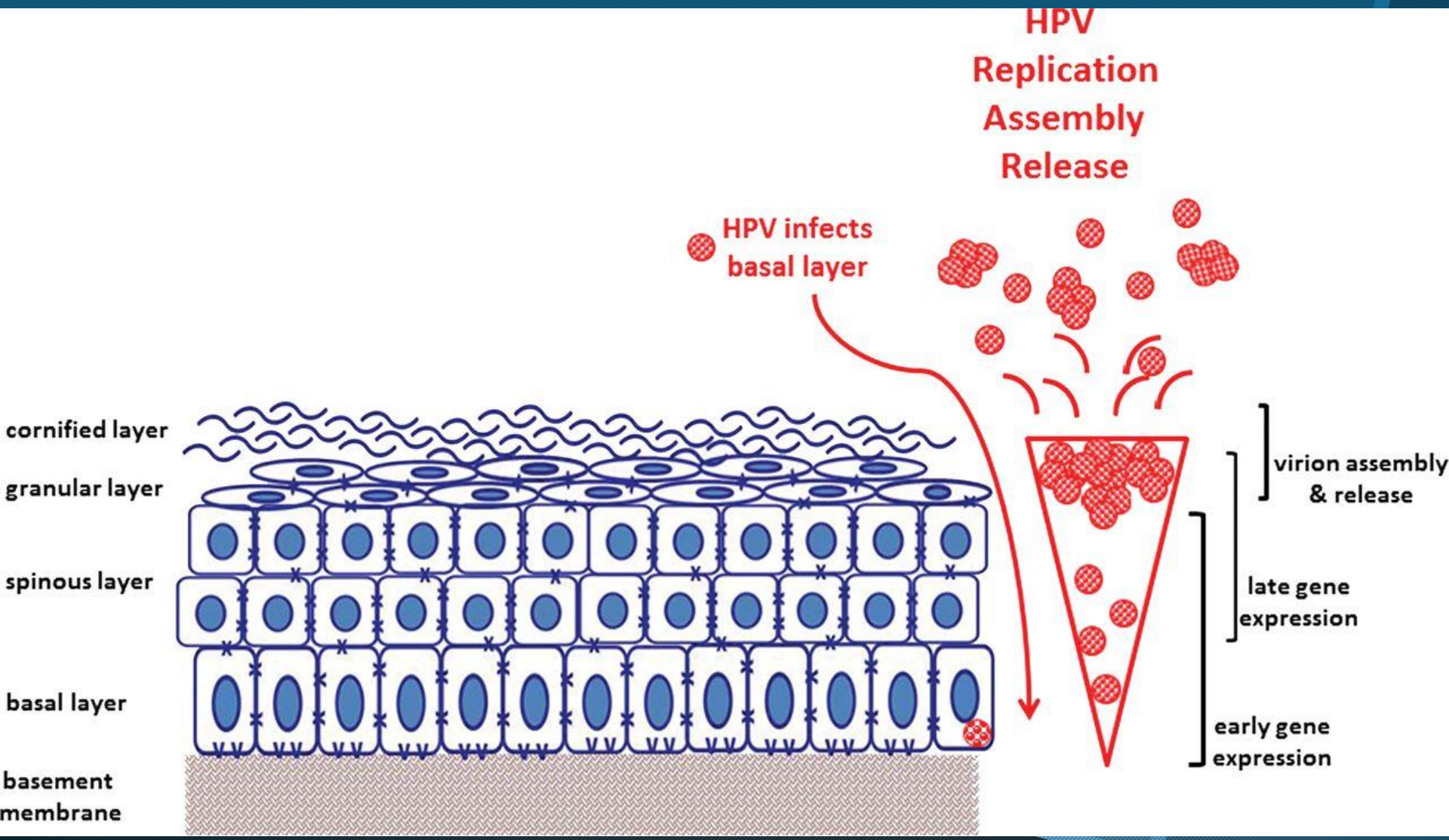


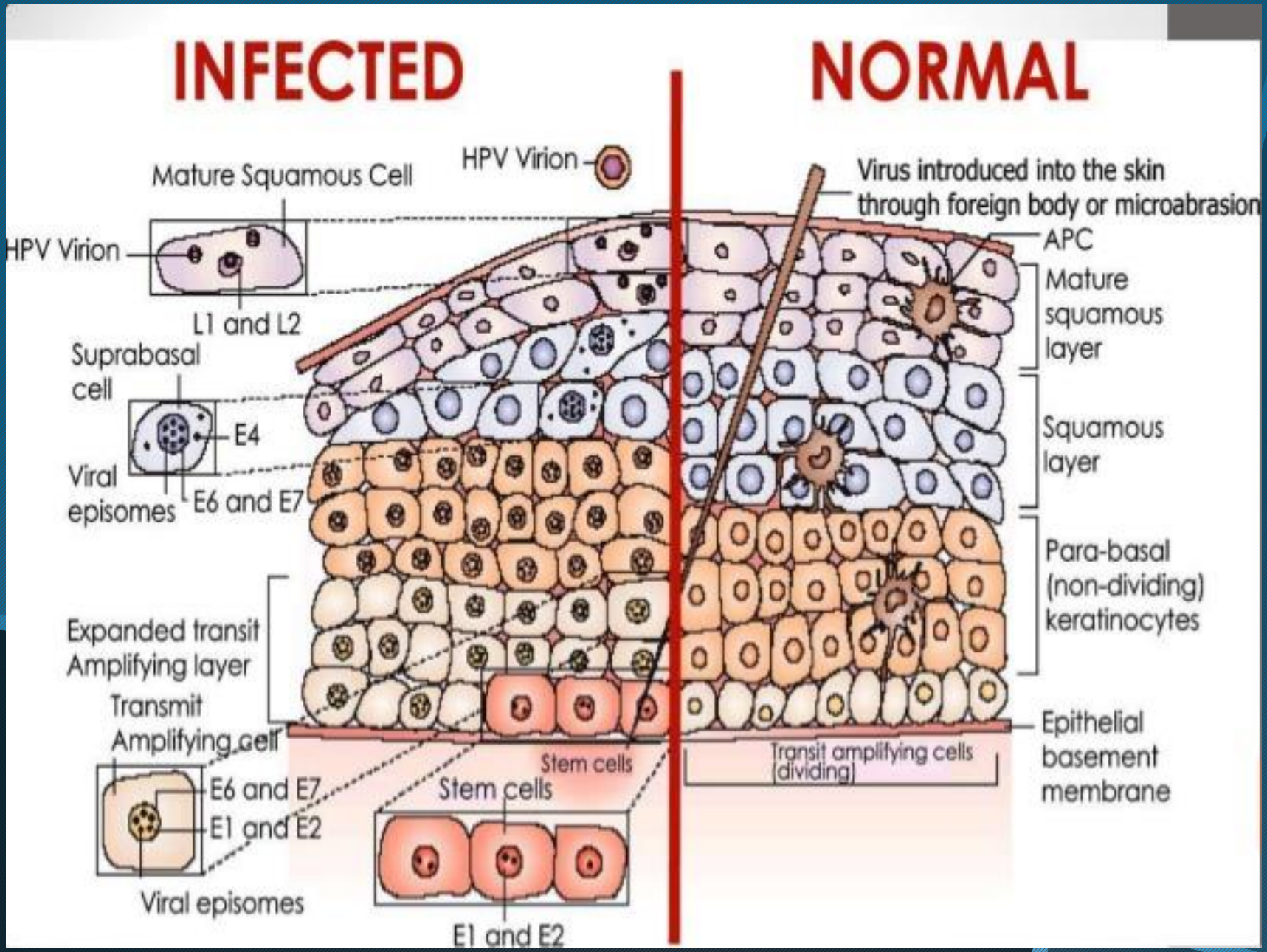
Two decades ago **20% of oral cancers** were HPV-related. Today, that number has **grown to 50%**.

Oral Cancer is spreading. What was once considered an old man's disease is now crossing over into younger and younger generations. **HPV related cancers** are 6-7 times more common in men than women and is responsible for a **15x increase in oral cancer diagnosis**.

5021 Washington Rd. Kenosha, WI 53144 • Phone: 262-654-6770 • www.santarelliofs.com

Source: www.meadowbrookdentalcare.com

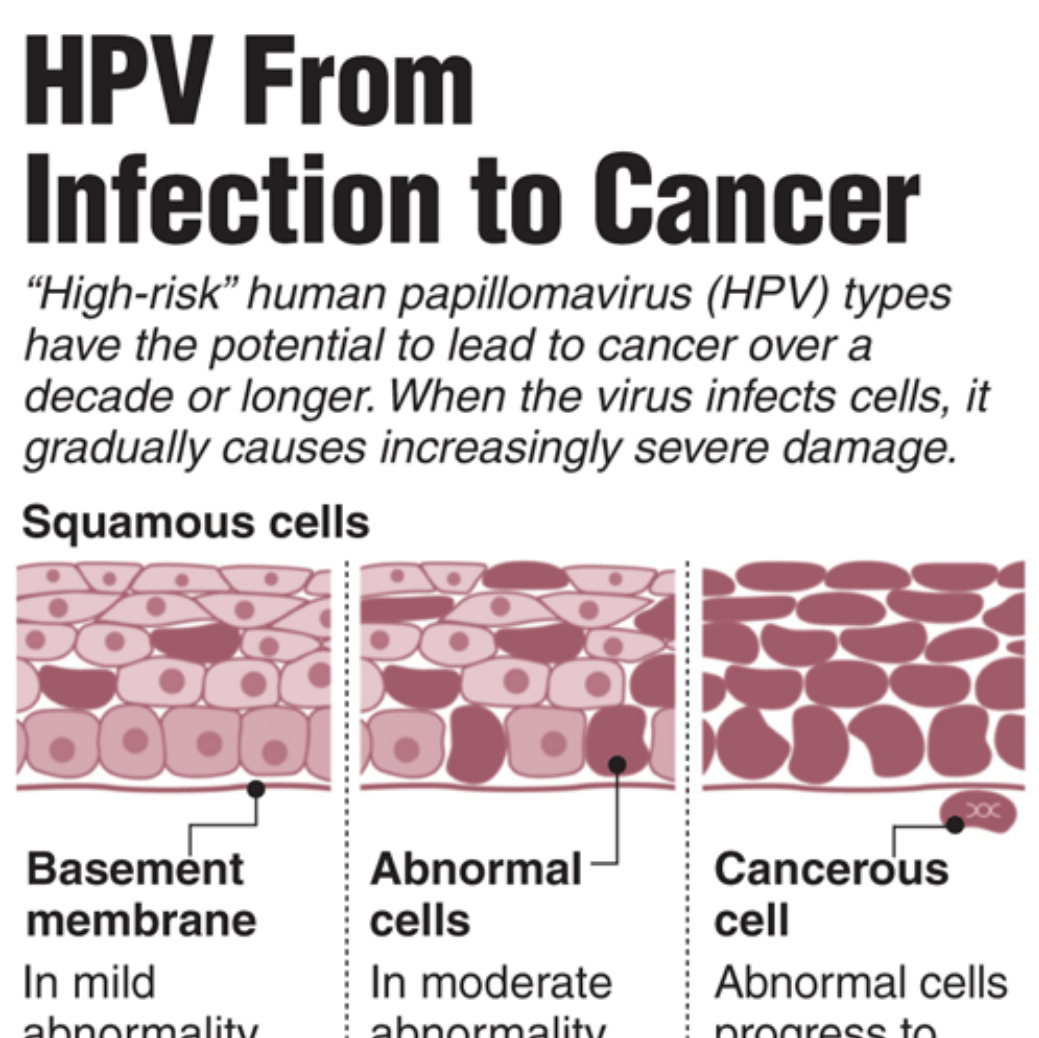

HPV
Replication
Assembly
Release
HPV infects
basal layer
cornified layer
granular layer
spinous layer
basal layer
basement
membrane
virion assembly
& release
late gene
expression
early gene
expression


INFECTED
NORMAL
Mature Squamous Cell
HPV Virion
HPV Virion
L1 and L2
Suprabasal cell
E4
Viral episomes
E6 and E7
Expanded transit Amplifying layer
Transmit Amplifying cell
E6 and E7
E1 and E2
Viral episomes
Stem cells
Stem cells
E1 and E2
Virus introduced into the skin through foreign body or microabrasion
APC
Mature squamous layer
Squamous layer
Para-basal (non-dividing) keratinocytes
Epithelial basement membrane
Transit amplifying cells (dividing)

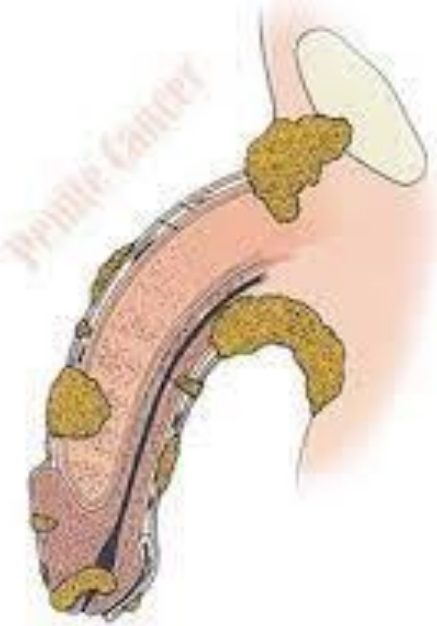
PENILE CANCER

HPV From Infection to Cancer

"High-risk" human papillomavirus (HPV) types have the potential to lead to cancer over a decade or longer. When the virus infects cells, it gradually causes increasingly severe damage.



MCT Source: Dr. Richard M. Haupt, Merck & Co.



LEUCOPLAKIA

- Present as solitary or multiple whitish plaques that often involves the meatus
- Surgical excision and radiation are the treatment

Penile tumour on the left side of the glans involving the corona glandis. Histopathological tumour growth into the corpus spongiosum without urethral involvement (T2).

Signs of Penile Cancer

For Information,
Visit: www.epainassist.com

You circumcised your son to prevent penile cancer?

I trust you had your children's breast tissue removed to prevent breast cancer as well...

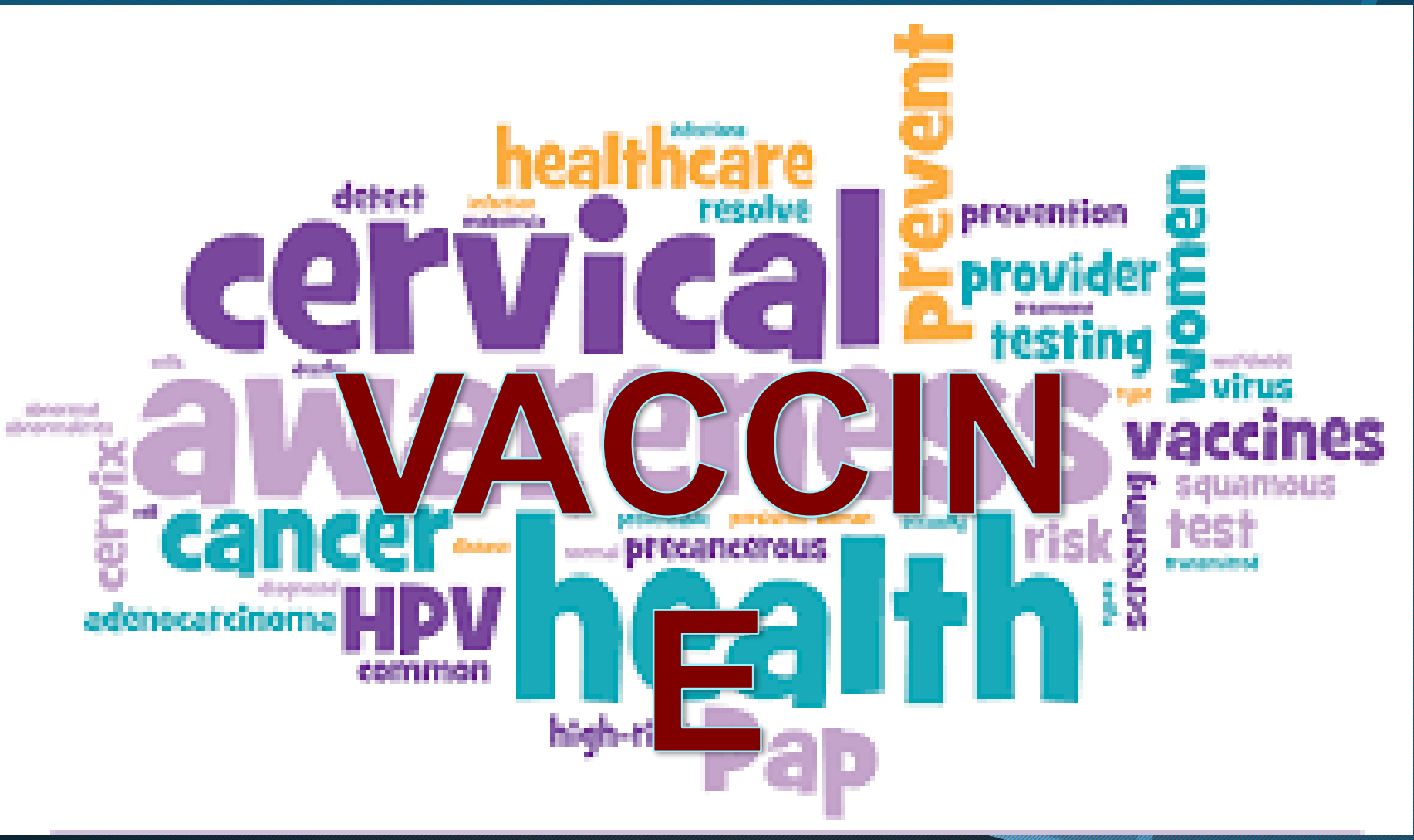
Cancer Type	New Cases/Yr	Incidence Rate	Deaths/Yr
Female Breast	232,670	1 in 8 women	40,000
Male Breast	2,360	1 in 1,000 men	430
Penile	1,640	<1 in 100,000 men	320

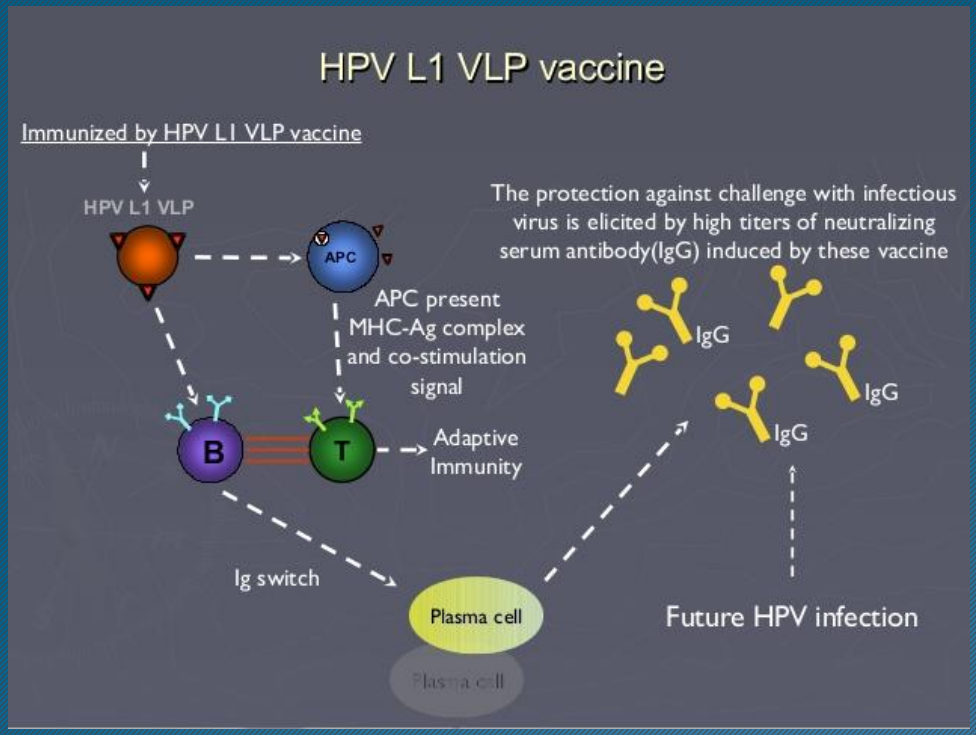
American Cancer Society 2014 Statistics cancer.org

DrMomma.org IntactHealth.org SavingSons.org

Medical Professionals for Genital Autonomy

VAKSIN HPV


healthcare
detect
resolve
Prevent
prevention
cervical
provider
women
testing
awareness
virus
VACCIN
vaccines
cervix
squamous
cancer
test
precancerous
risk
screening
health
adenocarcinoma
HPV
common
E
Pap



VAKSIN TIDAK MENGANDUNG VIRUS

VAKSIN BERISI BAGIAN KULIT VIRUS YG DIBUAT ATAU SINTESISNYA

Komponen Antigen Vaksin : L1 VLP vs HPV

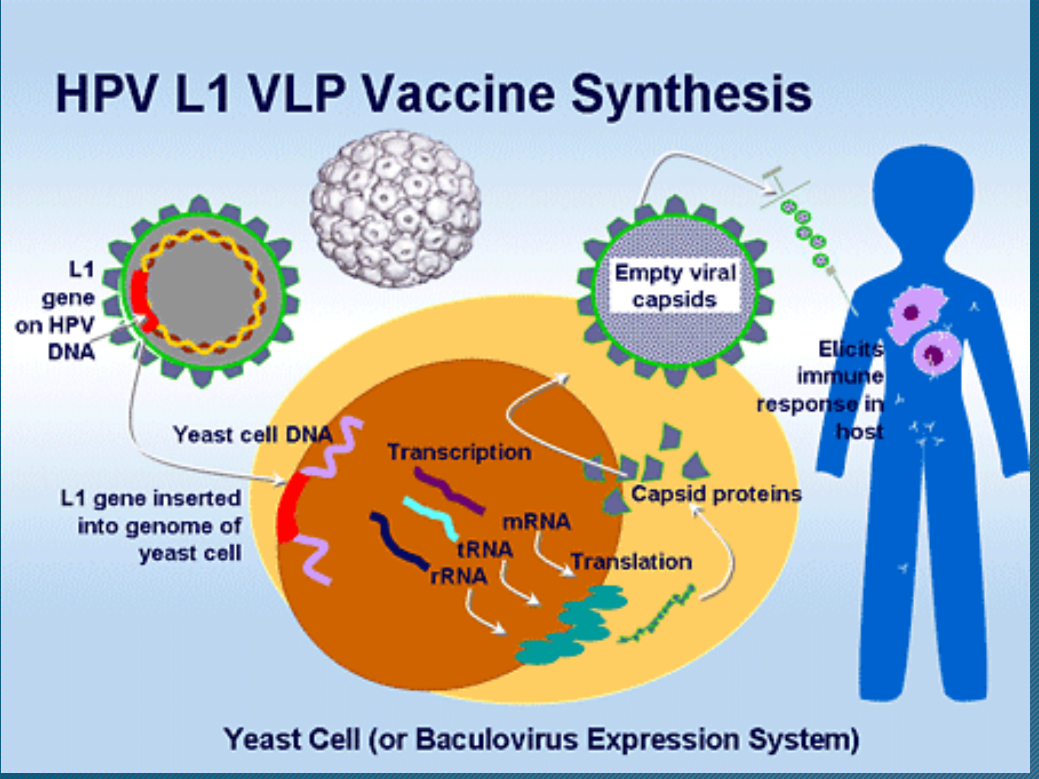
- Sistem imun akan mengenali L1 VLP seperti mengenali HPV
- L1 VLP tidak mengandung material (DNA)
- L1 VLP tidak infeksius dan tidak onkogenik

HPV

(Human Papillomavirus)

VLP

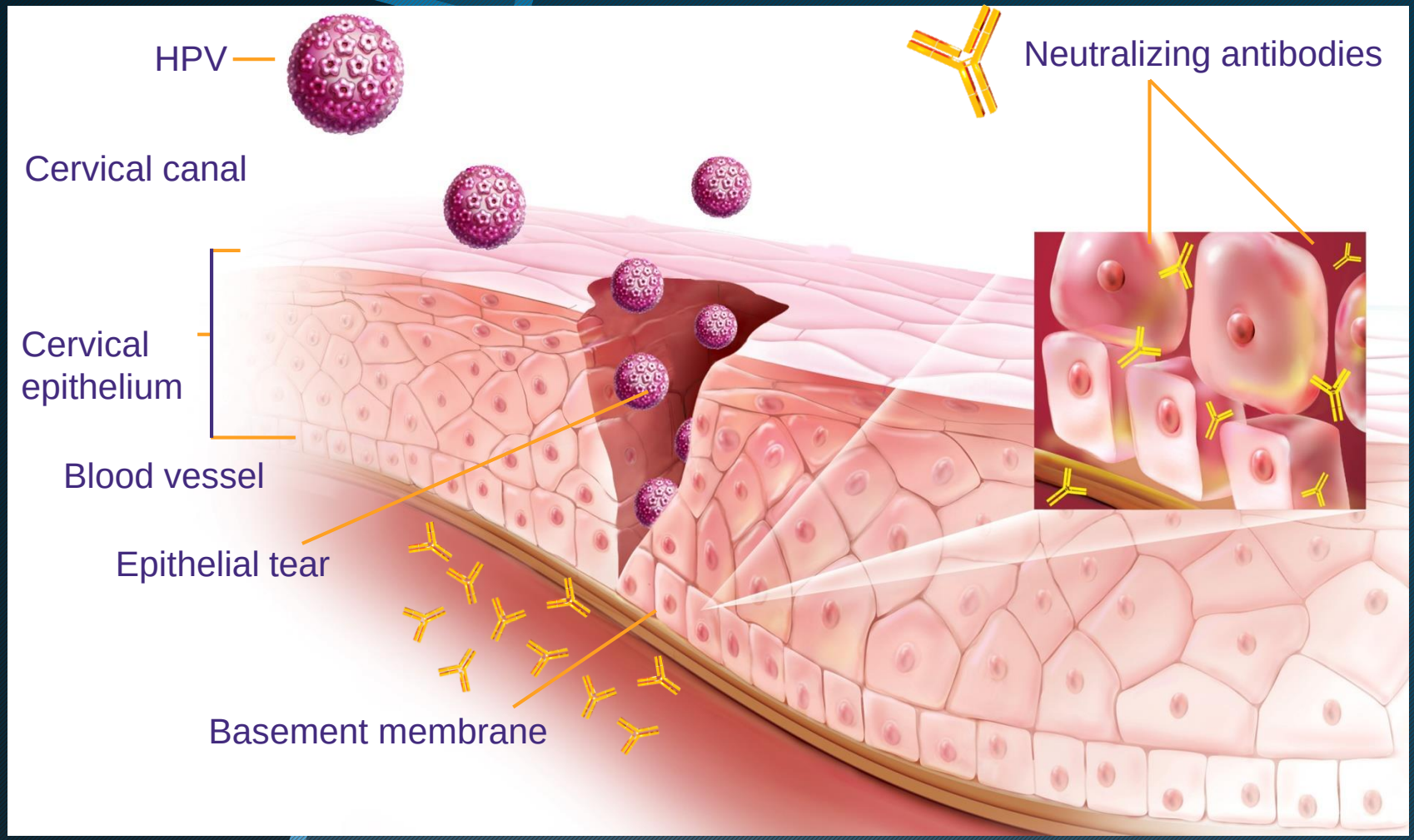
(Virus-like particle)



SUNTIKAN VAKSIN YANG MENGANDUNG VLP-HPV

AKAN MENIMBULKAN KEKEBALAN TERHADAP VIRUS HPV

PROSES NETRALISASI INFEKSI HPV

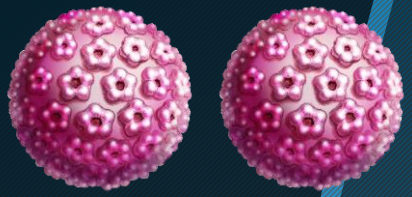


1. Stanley M. *Vaccine* 2006; **24:**S16–S22;
2. Giannini S, *et al. Vaccine* 2006; **24:**5937–5949;
3. Nardelli-Haefliger D, *et al. J Natl Cancer Inst* 2003; **95:**1128–1137;
4. Poncelet S, *et al.* IPC 2007(poster).

DUA VAKSIN HPV DI INDONESIA

Bivalent™

Antigens



HPV 16 VLPs HPV 18 VLPs

+

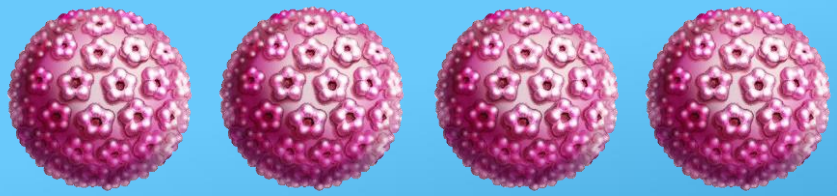
AS04 adjuvant

Aluminium salt ($Al(OH)_3$) + **MPL** Immunostimulant

AS04-containing vaccine

QUADRIVALENT

Antigens



HPV 16 VLPs HPV 18 VLPs HPV 6 VLPs HPV 11 VLPs

+

Adjuvant

Aluminium salt (amorphous aluminium hydroxyphosphate sulphate [AAHS])

AAHS-containing vaccine

JADWAL VAKSINASI

USIA	DOSIS	JADWAL
9 – 14 TH	2	0 – 6/12
14 – 44 TH	3	0 – 2 – 6/12

Immunogenicity of 2 doses of quadrivalent HPV vaccine in younger adolescents vs 3 doses in young women: A randomized independent study

Table 3. Summary of Month 7,18, 24, and 36 Anti–Human Papillomavirus Competitive Immunoassay Geometric Mean Titers in the Per-Protocol Population

	Girls, 9-13 y				Women, 16-26 y		GMT Ratio (95% CI), mMU/mL		
	2 Doses		3 Doses		3 Doses				
Antibodies	No. of Patients[a]	GMT (95% CI), mMU/mL	No. of Patients[a]	GMT (95% CI), mMU/mL	No. of Patients[a]	GMT (95% CI), mMU/mL	Girls (2-Dose)/Women (3-Dose)	Girls (2-Dose)/Girls (3-Dose)	Girls (3-Dose)/Women (3-Dose)
				Month 7					
HPV-16	243	7457 (6388-8704)	251	7640 (6561-8896)	246	3574 (3065-4169)	2.09 (1.61-2.71)[b]	0.98 (0.75-1.27)	2.14 (1.65-2.77)
HPV-18	243	1207 (1054-1384)	252	1703 (1489-1946)	264	661 (580-754)	1.83 (1.46-2.29)[b]	0.71 (0.56-0.89)	2.57 (2.06-3.22)
HPV-6	241	2186 (1846-2588)	248	1856 (1571-2192)	256	938 (796-1105)	2.33 (1.76-3.09)	1.18 (0.89-1.56)	1.98 (1.50-2.62)
HPV-11	243	2348 (2090-2638)	251	2096 (1869-2350)	269	1277 (1144-1427)	1.84 (1.52-2.23)	1.12 (0.92-1.36)	1.64 (1.36-1.98)
				Month 18					
HPV-16	96	1598 (1333-1916)	98	1804 (1508-2160)	92	837 (695-1008)	1.91 (1.40-2.60)	0.89 (0.65-1.20)	2.16 (1.58-2.94)
HPV-18	96	137 (106-177)	99	236 (184-304)	95	74 (57-95)	1.86 (1.21-2.87)	0.58 (0.38-0.89)	3.21 (2.09-4.93)
HPV-6	96	347 (291-414)	97	351 (294-418)	93	200 (168-240)	1.73 (1.28-2.34)	0.99 (0.74-1.33)	1.75 (1.30-2.36)
HPV-11	96	451 (380-535)	99	424 (359-502)	98	281 (238-333)	1.60 (1.20-2.14)	1.06 (0.80-1.42)	1.51 (1.13-2.01)
				Month 24					
HPV-16	195	1414 (1235-1618)	186	1739 (1514-1998)	189	813 (709-933)	1.74 (1.38-2.19)	0.81 (0.64-1.02)	2.14 (1.69-2.70)
HPV-18	195	132 (109-160)	187	267 (220-324)	202	91 (76-110)	1.44 (1.05-1.99)	0.49 (0.36-0.68)	2.92 (2.11-4.03)
HPV-6	193	276 (243-313)	186	359 (315-409)	195	197 (173-224)	1.40 (1.13-1.74)	0.77 (0.62-0.96)	1.82 (1.47-2.27)
HPV-11	195	368 (324-420)	186	422 (369-482)	206	267 (235-303)	1.38 (1.11-1.72)	0.87 (0.70-1.09)	1.58 (1.27-1.97)
				Month 36					
HPV-16	86	1151 (918-1444)	83	1413 (1122-1780)	86	678 (540-850)	1.70 (1.16-2.49)	0.81 (0.55-1.20)	2.09 (1.42-3.07)
HPV-18	86	104 (77-141)	83	239 (175-327)	96	71 (53-95)	1.46 (0.88-2.41)	0.43 (0.26-0.73)	3.35 (2.02-5.58)
HPV-6	84	239 (195-292)	83	372 (304-456)	92	176 (145-213)	1.36 (0.97-1.90)	0.64 (0.46-0.90)	2.12 (1.51-2.96)
HPV-11	86	298 (244-364)	82	410 (335-503)	97	208 (172-251)	1.43 (1.03-1.99)	0.73 (0.52-1.02)	1.97 (1.42-2.75)

Abbreviations: GMT, geometric mean titer; HPV, human papillomavirus; mMU/mL, milli-Merck units per milliliter.
[a]Number of negative samples available for a specific HPV genotype at baseline. Per-protocol population criteria also required a negative HPV DNA vaginal swab result at baseline for the specific HPV genotype.
[b]Results corresponding to the primary objective.

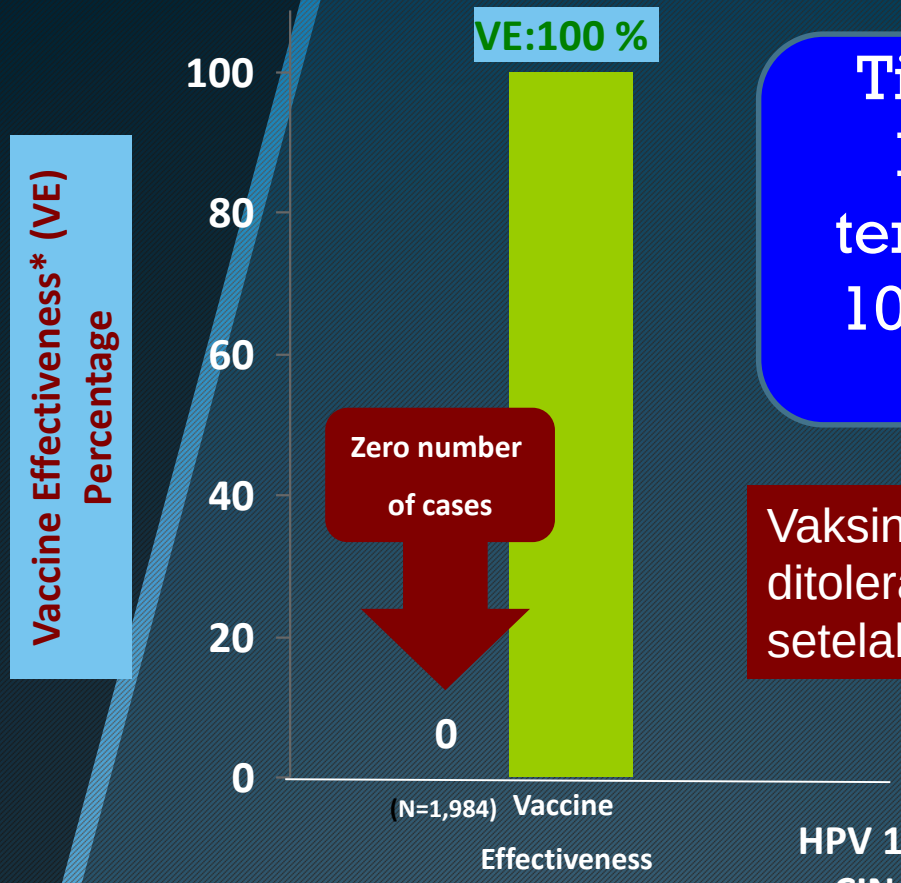
The GMT ratios for girls (2 doses) to women (3 doses) remained noninferior for all genotypes to 36 months. Antibody responses in girls were noninferior after 2 doses vs 3 doses for all 4 vaccine genotypes at month 7, but **not for HPV-18 by month 24 or HPV-6 by month 36.**

Dobson *et al. JAMA 2013*

ANTI-BODI
9-14 TH
2 DOSIS = 3 DOSIS

Effectiveness terhadap HPV 16/18-terkait CIN 2 atau lebih buruk

Per Protocol Efficacy Population (N=1984)
Longest follow up: 10 years



Tidak ada kasus PRA-KANKER terkait HPV 16/18 10 tahun sesudah vaksinasi

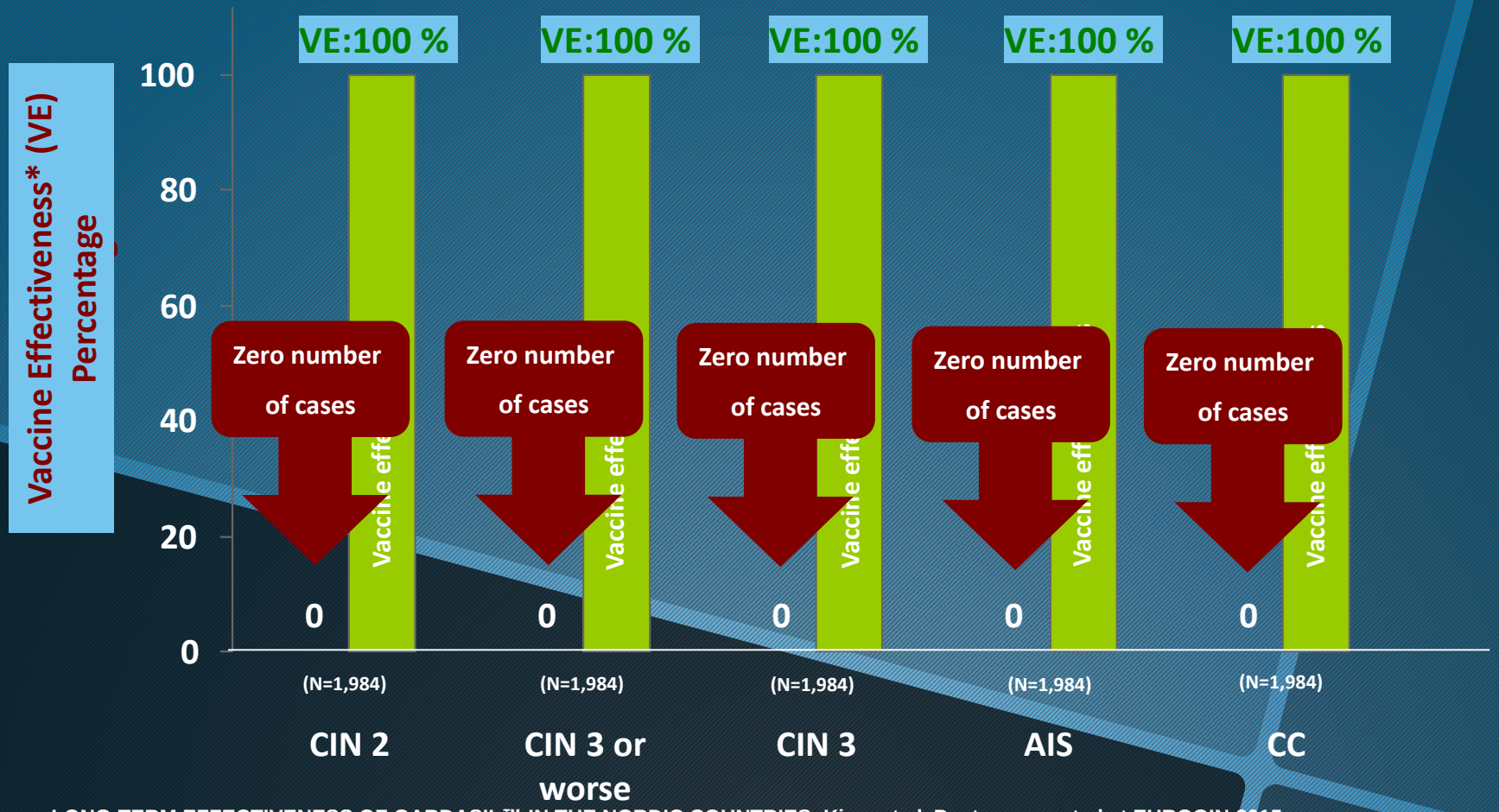
Vaksin qHPV tetap aman dan ditoleransi dengan baik~10 tahun setelah vaksinasi.

LONG-TERM EFFECTIVENESS OF GARDASIL™ IN THE NORDIC COUNTRIES. Kjaer et al. Poster presented at EUROGIN 2015.

eness measures the relative reduction of the disease incidence in vaccine recipients compared to the baseline incidence rate of 0.0287 per 100 person
l from the incidence rate in an unvaccinated cohort and under the assumption vaccine efficacy is 90%.

Effectiveness berdasarkan Tipe Lesi

Efektifitas Population (N=1984)
Pengamatan selama : 10 years

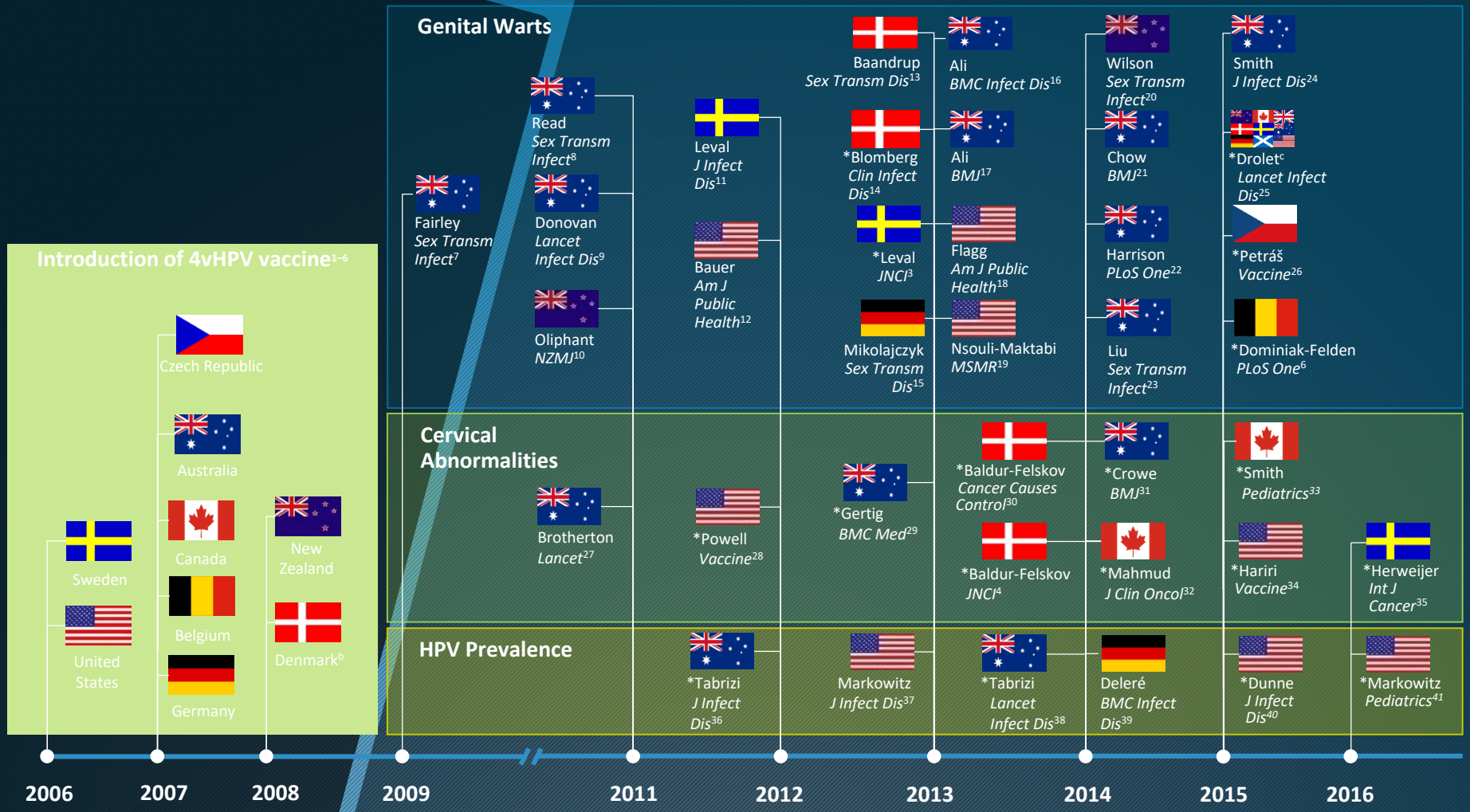


LONG-TERM EFFECTIVENESS OF GARDASIL™ IN THE NORDIC COUNTRIES. Kjaer et al. Poster presented at EUROGIN 2015.

eness measures the relative reduction of the disease incidence in vaccine recipients compared to the baseline incidence rate of 0.0287 per 100 person
from the incidence rate in an unvaccinated cohort and under the assumption vaccine efficacy is 90%.

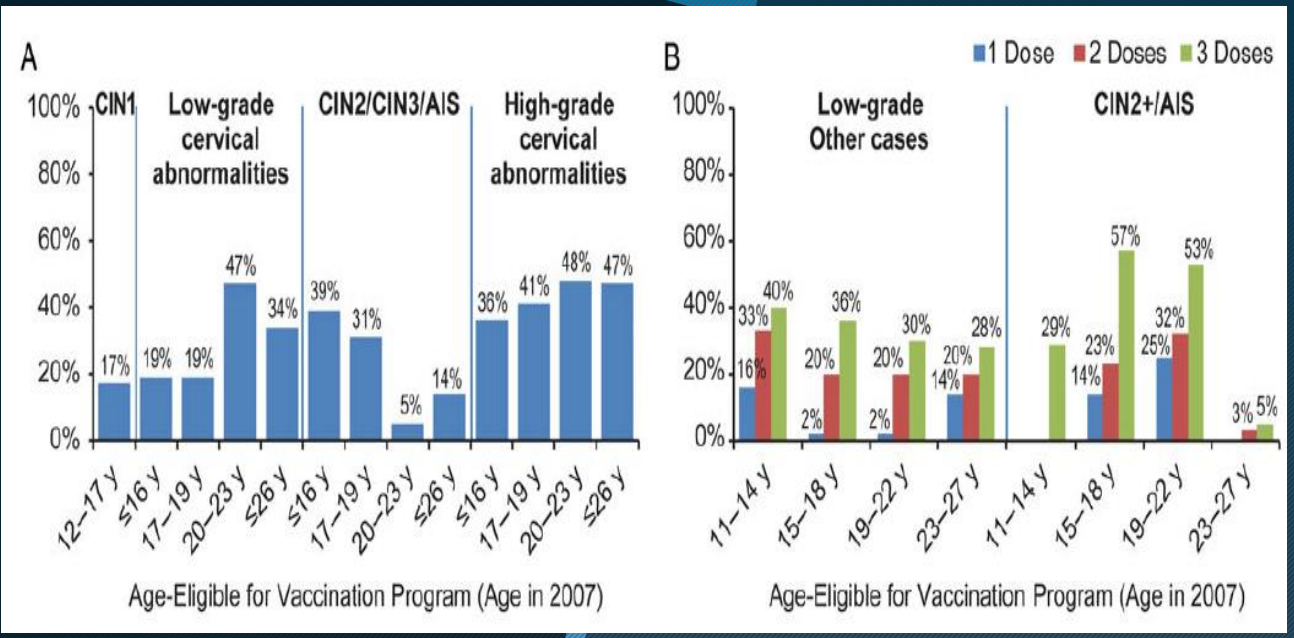
PROGRAM VAKSINASI NASIONAL DI DUNIA

PENELITIAN HASIL PROGRAM VAKSINASI NASIONAL DI NEGARA2 DUNIA[a]



*Study links effectiveness data to vaccination status [a]Includes reports published in the peer-reviewed scientific literature, and does not encompass reports at scientific conferences. [b]Beginning on February 1, 2016 the childhood vaccination program includes the 2vHPV vaccine.[42] [c]Meta-analysis of data from 20 studies in 9 countries (United States, Australia, England, Scotland, New Zealand, Sweden, Denmark, Canada, and Germany), including both 4vHPV vaccine and 2vHPV vaccine.[25]
Please see corresponding slide note for references.

Australia: Cervical Abnormalities reduction



PIN

HPV

AUSTRALIA

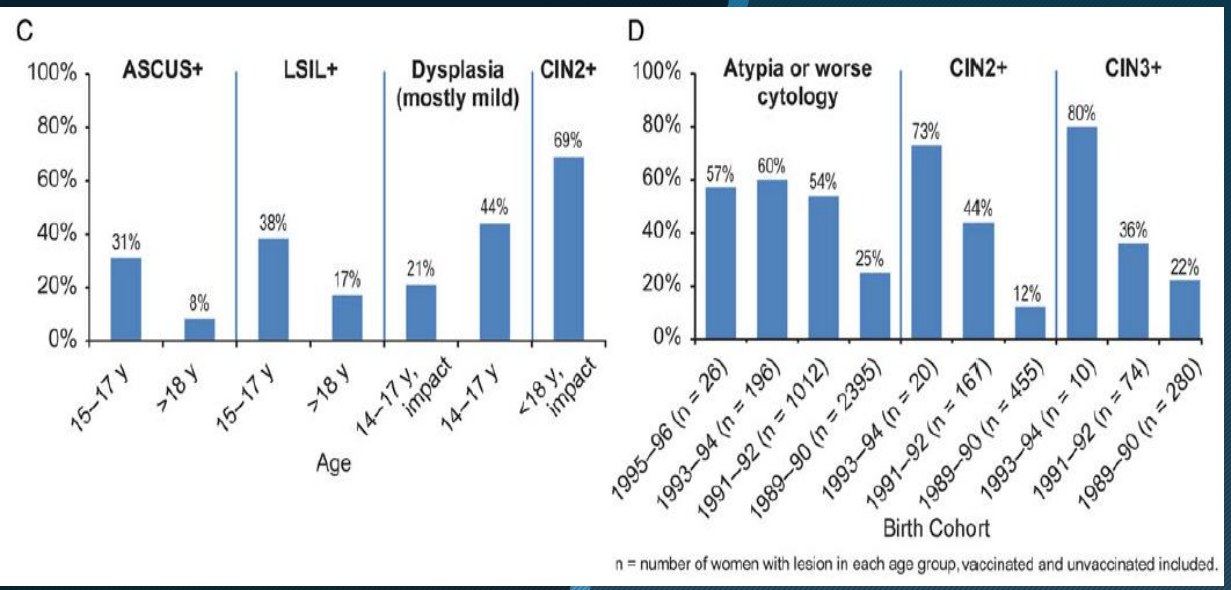
TERJADI PENURUNAN ANGKA PENDERITA PRA-KANKER SERVIKS (17 - 48%)

Australia: Population-based analysis of % reduction in cervical abnormalities among vaccinated (at least 1 dose) vs contemporaneous unvaccinated screened females in Victoria

Australia: Population-based analysis of percentage reduction in cervical abnormalities among vaccinated vs contemporaneous unvaccinated screened females in Queensland

Garland et al; Impact and Effectiveness of the Quadrivalent Human Papillomavirus Vaccine: A Systematic Review of 10 Years of Real-world Experience: CID, 2016

Canada & Denmark: Cervical Abnormalities reduction



PIN HPV
DENMARK
CANADA

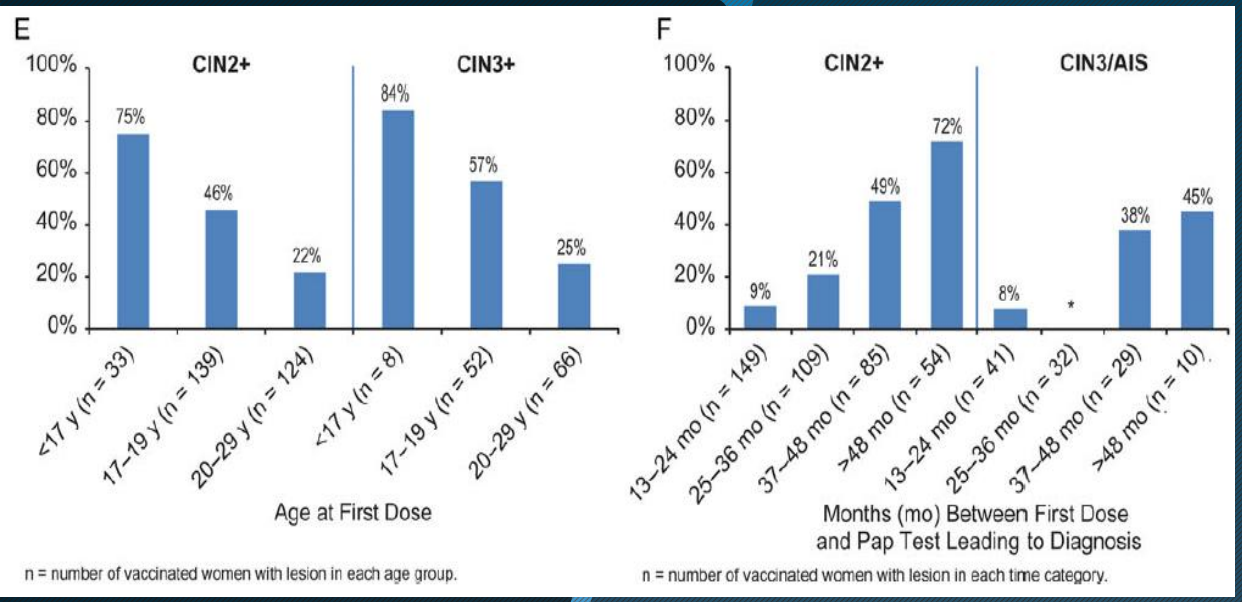
TERJADI PENURUNAN ANGKA PENDERITA PRA-KANKER SERVIKS (12 - 80%)

Canada: % reduction in cervical abnormalities in vaccinated/vaccine era vs contemporaneous unvaccinated/ prevaccine era in 3 provinces

Denmark: %reduction in cervical abnormalities in females vaccinated with 4vHPV vaccine (≥1 dose) vs unvaccinated women by birth cohort

Garland et al; Impact and Effectiveness of the Quadrivalent Human Papillomavirus Vaccine: A Systematic Review of 10 Years of Real-world Experience: CID, 2016

Sweden & USA: Cervical Abnormalities reduction



PIN HPV
SWEDIA
USA

TERJADI PENURUNAN ANGKA PENDERITA PRA-KANKER SERVIKS (9 - 84%)

Sweden: % reduction in CIN2+ and CIN3+ among females fully vaccinated with 4vHPV vaccine (3 doses) vs unvaccinated /partially vaccinated females, by age at first dose

United States: % reduction in HPV 16/18-related cervical abnormalities among females vaccinated with 4vHPV vaccine (at least 1 dose) vs contemporaneous unvaccinated females

Garland et al; Impact and Effectiveness of the Quadrivalent Human Papillomavirus Vaccine: A Systematic Review of 10 Years of Real-world Experience: CID, 2016

World Health Organization

The second question is how to reach the population. Although the vaccine is approved for women up to the age of 26, it is generally considered to be best administered at the age of nine to 13 years, before girls become sexually active and potentially exposed to HPV.

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

- The target age for vaccination is 11-12 years for girls and boys.

American Cancer Society recommendations

To work best, the HPV vaccine should be given before the young person has had any type of sexual contact with another person.

- Routine HPV vaccination is recommended for girls 11 to 12 years old.

Approval for the new indication is based on a single randomized, controlled trial of 4,065 patients, including 602 men who have sex with men. Among the MSM population, the point estimate of efficacy for Gardasil was 78% (95% CI, 40-93) for the primary composite endpoint of prevention of any grade anal intraepithelial neoplasia and anal cancer. Efficacy was 75% (95% CI, 9-93) for grade 2 or higher anal intraepithelial neoplasia.

FDA approves HPV vaccine for anal cancer

HemOnc Today, January 25, 2011

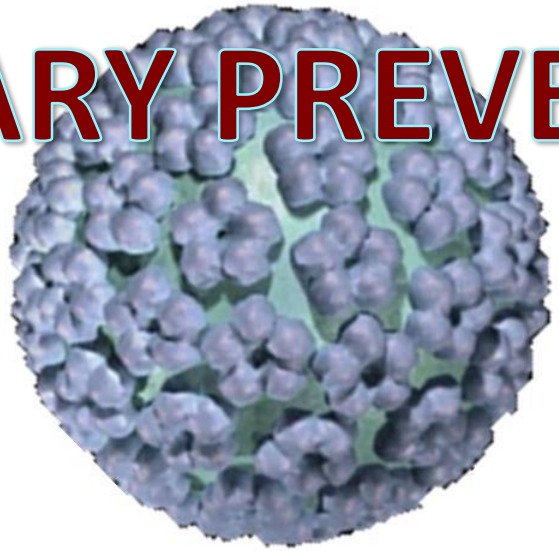
Efficacy was 75% for grade 2 or Higher anal intraepithelial neoplasia

PROGRAM VAKSINASI

Burden of HPV Infections

Preventing a Viral Infection to Prevent Cancer

Mencegah Infeksi HPV berarti Mencegah Kanker

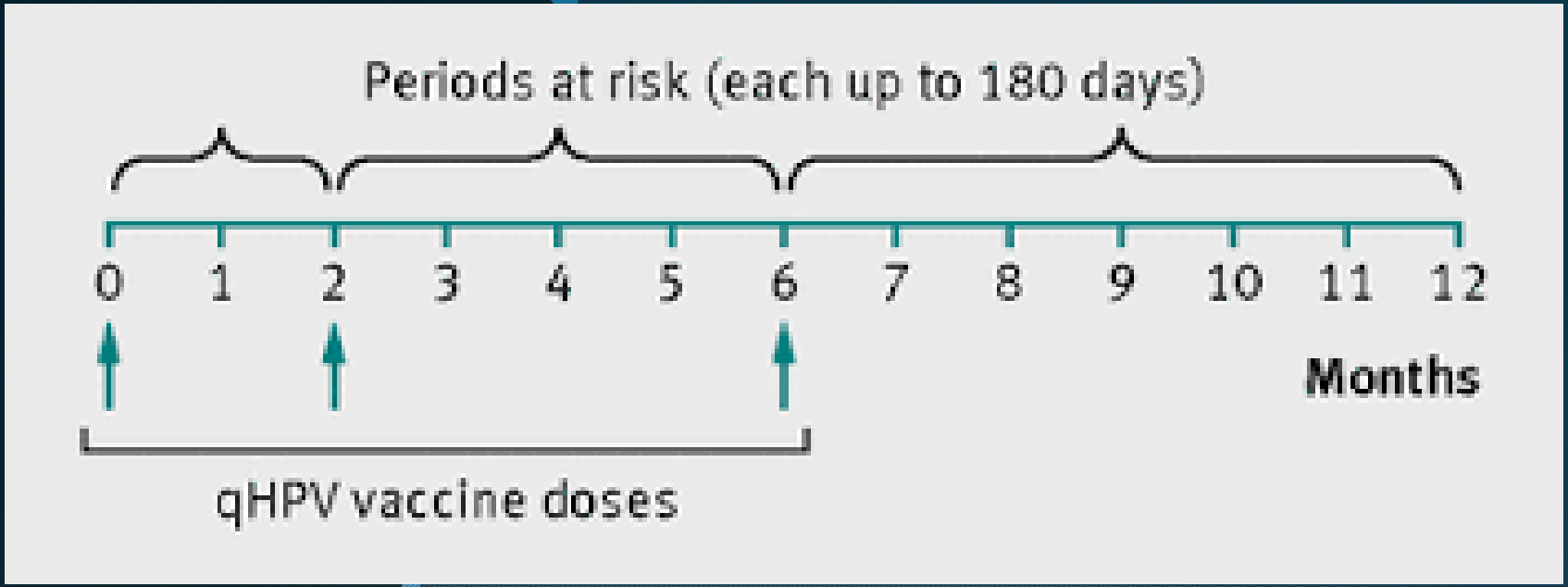


PRIMARY PREVENTION

PENCEGAHAN PRIMER

Medscape EDUCATION

INJECTION SCHEDULE



Quadrivalent, 0-2-6
Bivalent, 0-1-6

9 – 13 years old : **TWO DOSES**
Suntikan : 0-6/12

Vaksinasi HPV

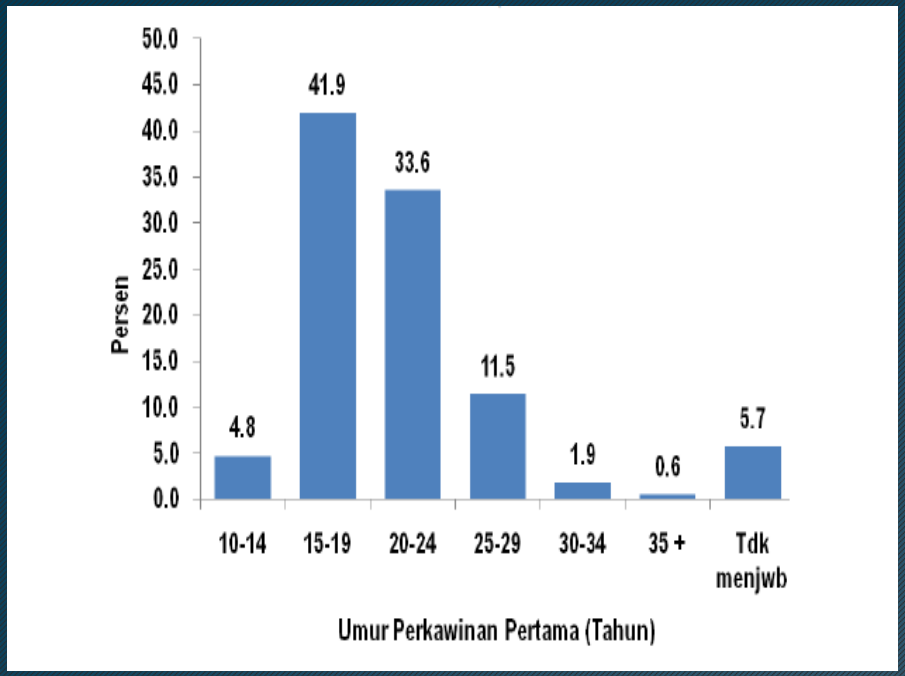
DOSIS

Usia 9-13 Th : 2 dosis

10 years old

Relevant Trends in Indonesia : Early Age at First Marriage

Age at first marriage[1]



Percentage of women aged 10-59 years based on age at first marriage[1]

Pre-marital sex and aged of sexual activity[2]

"Survey taken from 63.428 respondent aged 10-24 years. 86.7% of them haven't been married[2]

"Among those who haven't been married, 3% man and 1.1% women said they already sexually active[2]

Umur	Laki laki	Perempuan
8	0.1	0.5
9		1.0
10	0.5	1.3
11	0.2	0.9
12	0.3	0.6
13	1.5	3.6
14	2.2	4.0
15	6.5	5.4
16	7.9	10.8
17	10.6	11.8
18	15.9	10.1
19	12.9	14.3
20	18.4	12.3
21	6.9	8.2
22	6.3	3.7
23	4.2	2.8
24	1.2	1.3
Tidak tahu	4.0	7.1
Tdk menjawab	0.3	0.3

Proportion of respondent aged 10-24 years who haven't been married based on first age sexually active [2]

1,2. Riskesdas 2010. Badan Penelitian dan Pengembangan Kesehatan, Kemenkes RI

MENUJU PROGRAM BIAS NASIONAL VAKSINASI HPV

94 %


Pencanangan imunisasi HPV
dalam Bulan Imunisasi Anak Sekolah
Jakarta, 4 Oktober 2016


Pencanangan imunisasi HPV
dalam Bulan Imunisasi Anak Sekolah

Pelaksanaan Imunisasi SDN Kramat Pela 09


Kegiatan
pencanangan


Imunisasi HPV


Kecamatan Kebayoran lama

Pencanangan BIAS HPV Kec.Jagakarsa

di SDN 07 Srengseng Sawah


Pencanangan HPV 4 Okt 2016
SDN 03 04 Penjaringan


7K






Conclusion: Alternative Dosing Schedule With qHPV Vaccine

- There is interest in an alternative dosing schedule in preadolescents and adolescents.[1]
- A published immunobridging study has demonstrated that the **immunogenicity of 2 doses of qHPV vaccine in 9–13 year old girls is noninferior to 3 doses in women.**[2]
- Long-term clinical effectiveness studies will be needed to demonstrate if a 2-dose schedule offers an adequate duration of protection or if a booster may be needed.[2]

qHPV=quadrivalent human papillomavirus.

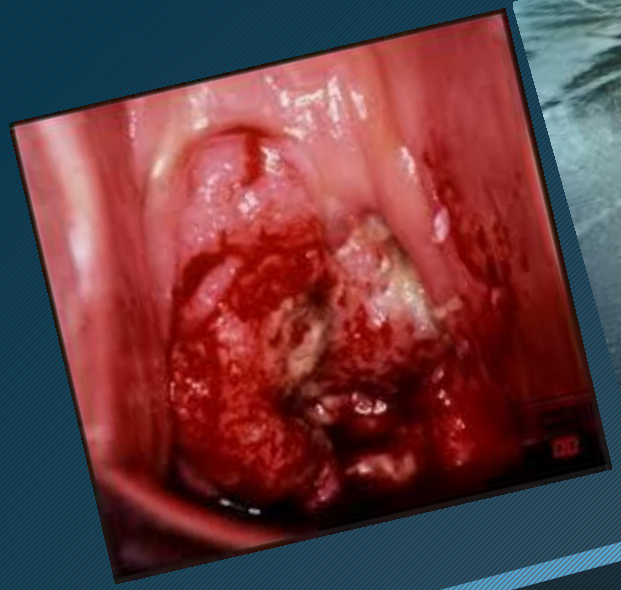
1. Markowitz LE et al. *Vaccine*. 2012;30(Suppl 5):F139–148. **2.** Dobson S et al. *JAMA*. 2013;309:1793–1802.


2016 DKI
2017 DKI, YOG, SRBY
2018 DKI, YOG, SRBY, MKSR, MENADO
NIP

YOU CAN PREVENT CANCER

HPV VACCINE IS THE KEY

PREVENTION WORKS!




THANK
YOU