

Cervical cancer

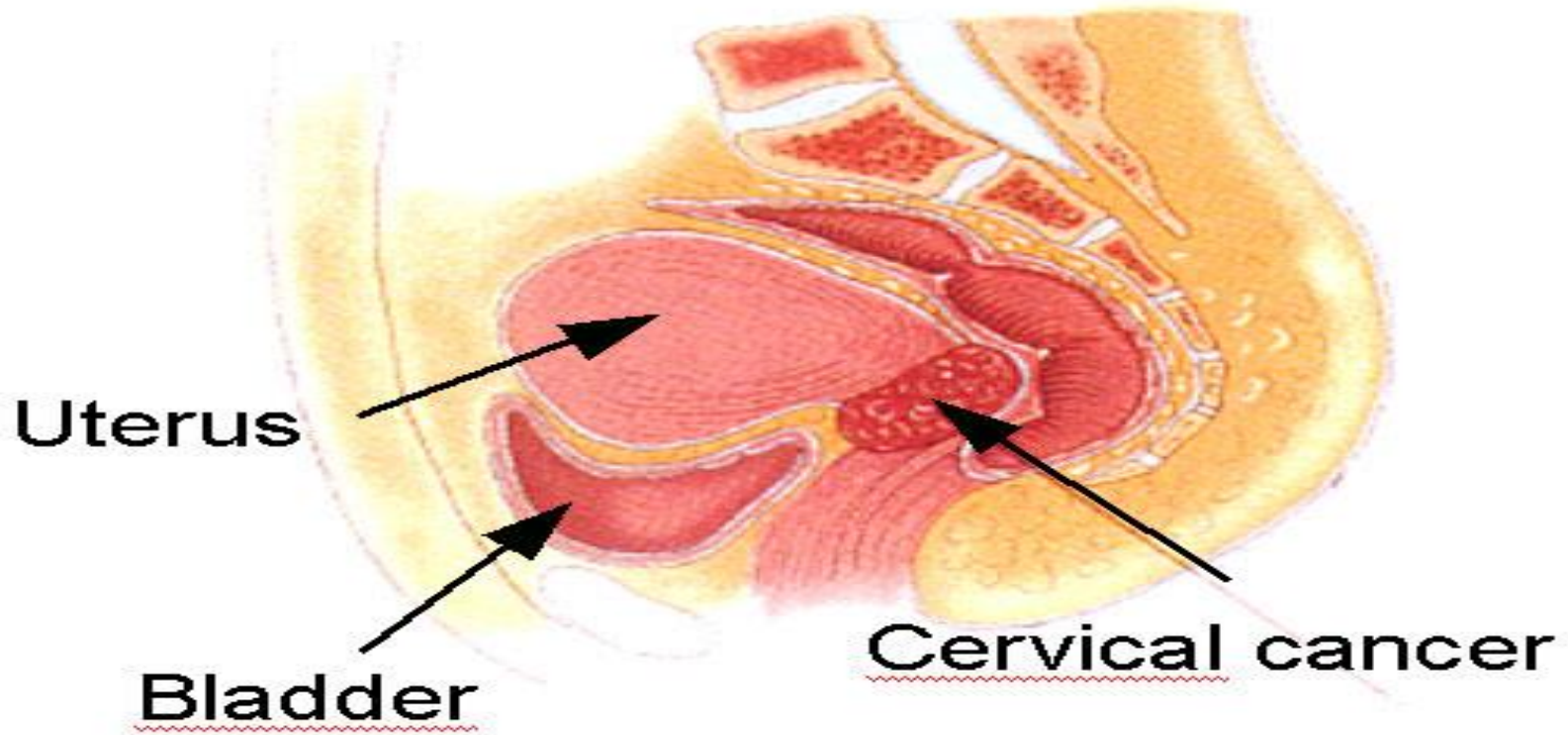


Wishing your
enjoying



9 Sep 2021

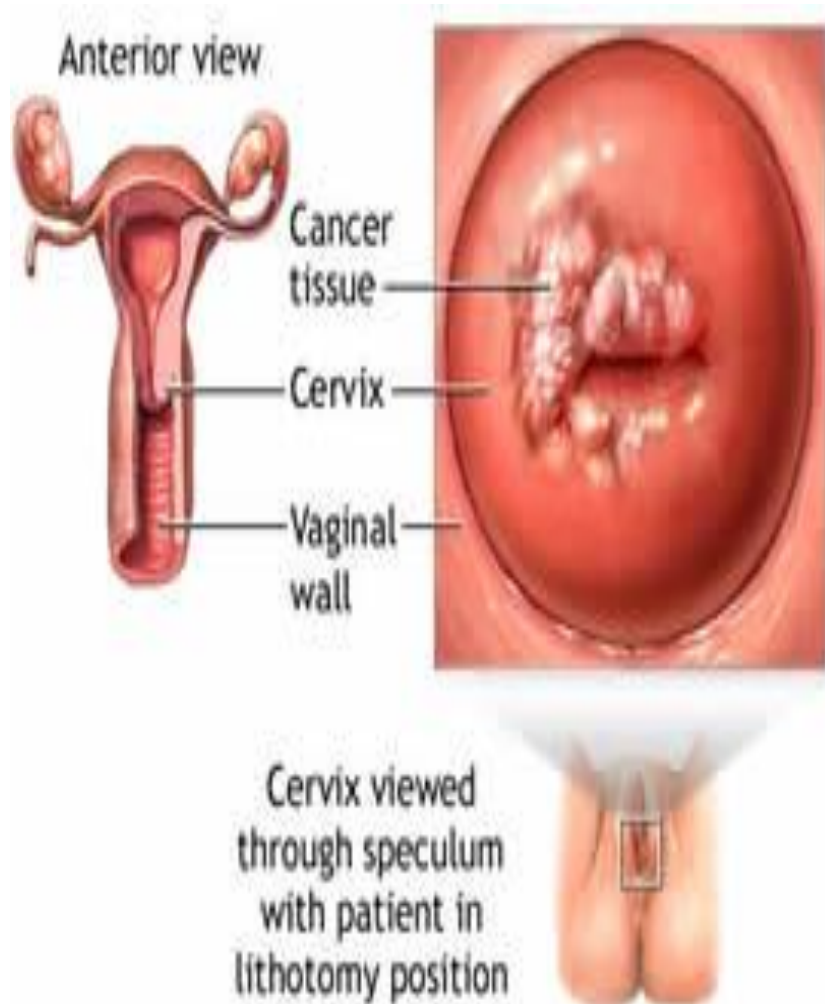
Cervical cancer



Hongyun Zhang

The first affiliated Hospital of Kunming Medical University

Cervical cancer

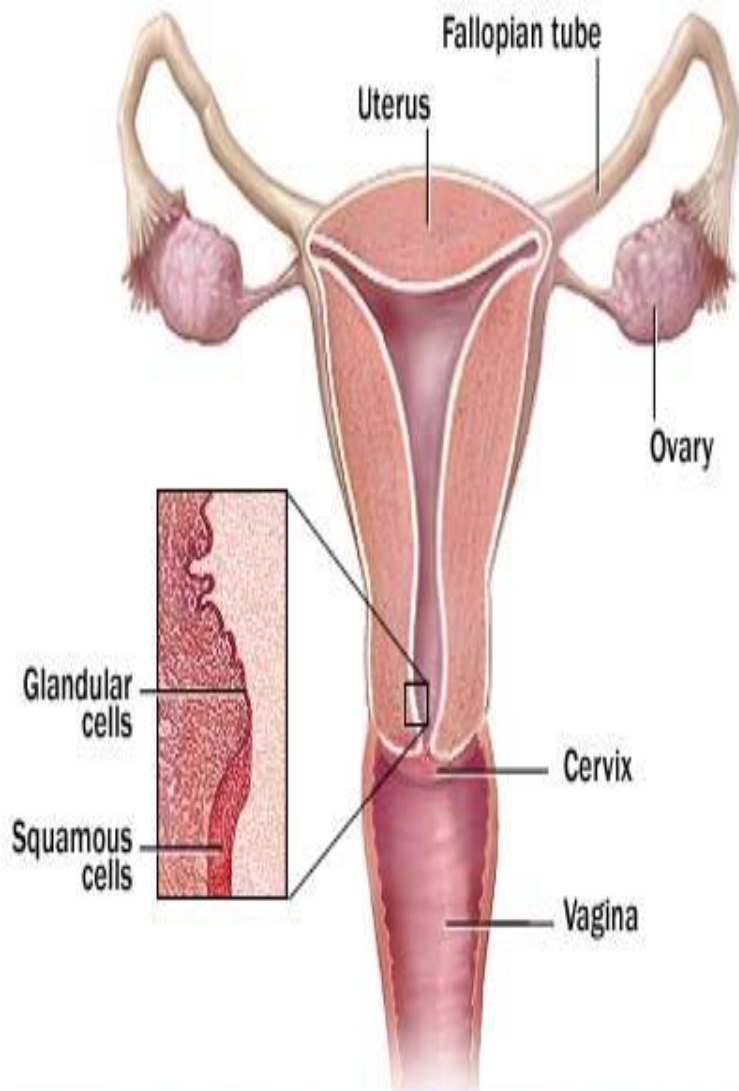


It is a cancer of the female reproductive tract

It is the most common cause of cancer death in the world where Pap tests are not available

It is the easiest gynecologic cancer to prevent through screening

Cervical cancer

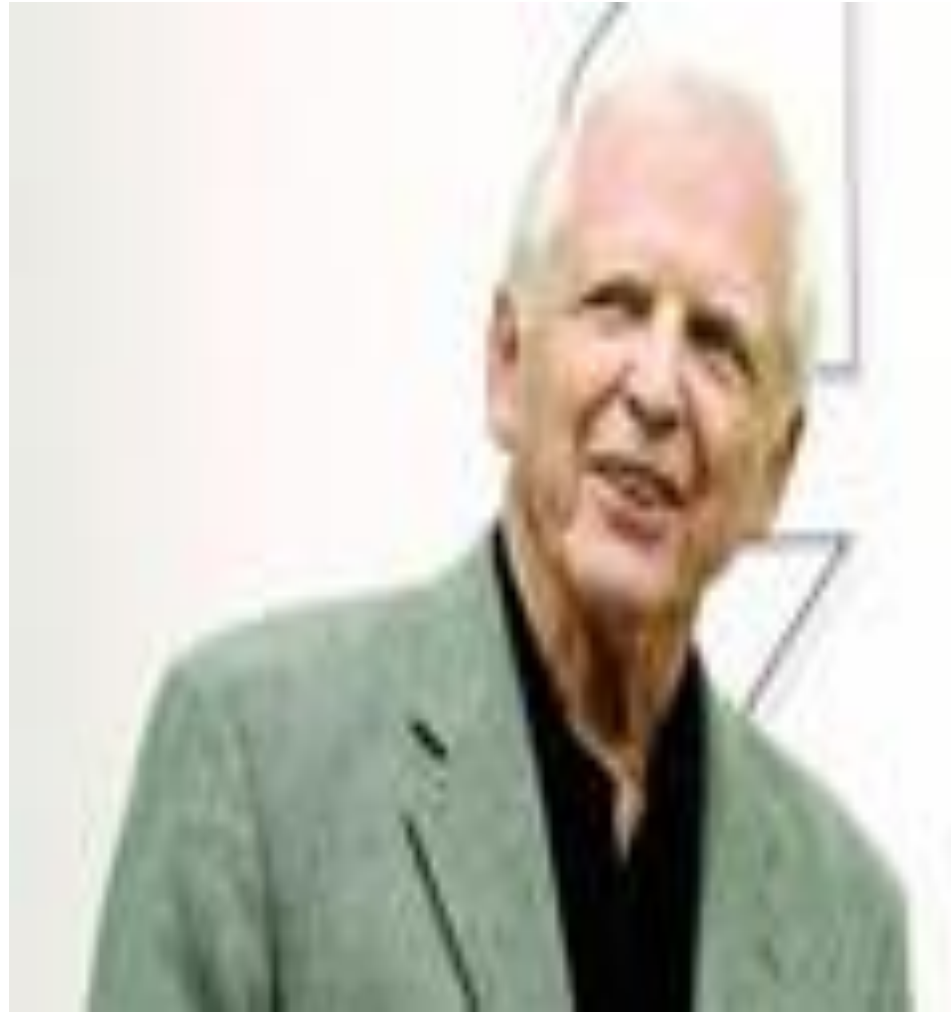


- Opening of the uterus (womb) into the vagina
- Two cell types present (*squamous and glandular*)
- Cervical cancers tend to occur where the two cell types meet

The WHO's *Global Strategy for the Elimination of Cervical Cancer a Public Health Problem* provides a roadmap, through the following 90-70-90 targets for 2030

- 90% of girls fully vaccinated with the HPV vaccine by age 15
- 70% of women are screened with a high-performance test by 35 and 45 years of age
- 90% of women identified with cervical disease receive treatment (90% of women with pre-cancer treated; 90% of women with invasive cancer managed)

HPV





The Nobel Prize in Physiology or Medicine 2008



© Klaus Rüschoff, Springer Medizin Verlag

Harald zur Hausen

🕒 1/2 of the prize

Germany

German Cancer Research Centre
Heidelberg, Germany

b. 1936



Photo: Sakutin/SCANPIX

Françoise Barré-Sinoussi

🕒 1/4 of the prize

France

Regulation of Retroviral Infections Unit, Virology Department, Institut Pasteur
Paris, France

b. 1947



Photo: Magunia/SCANPIX

Luc Montagnier

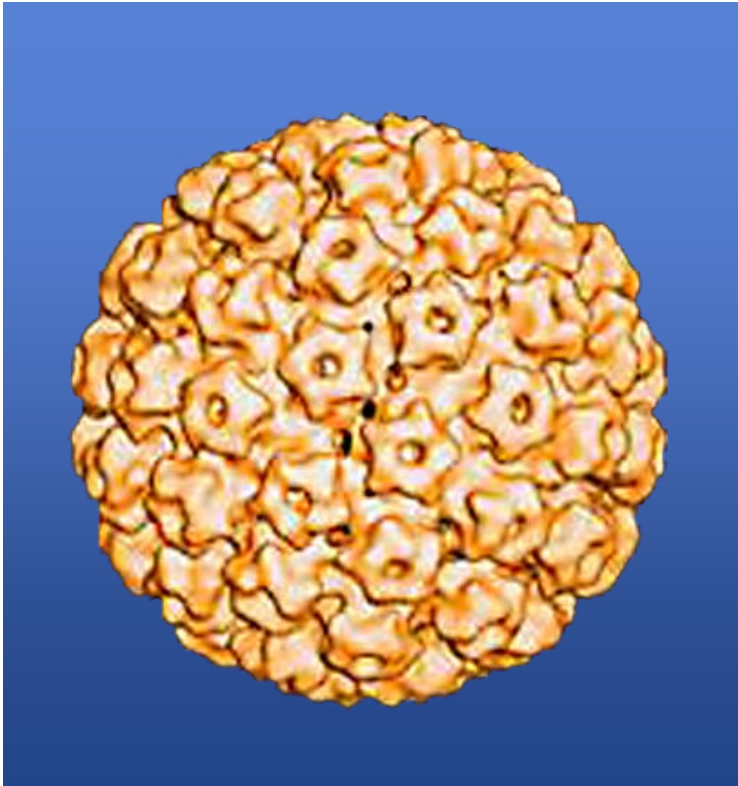
🕒 1/4 of the prize

France

World Foundation for AIDS Research and Prevention
Paris, France

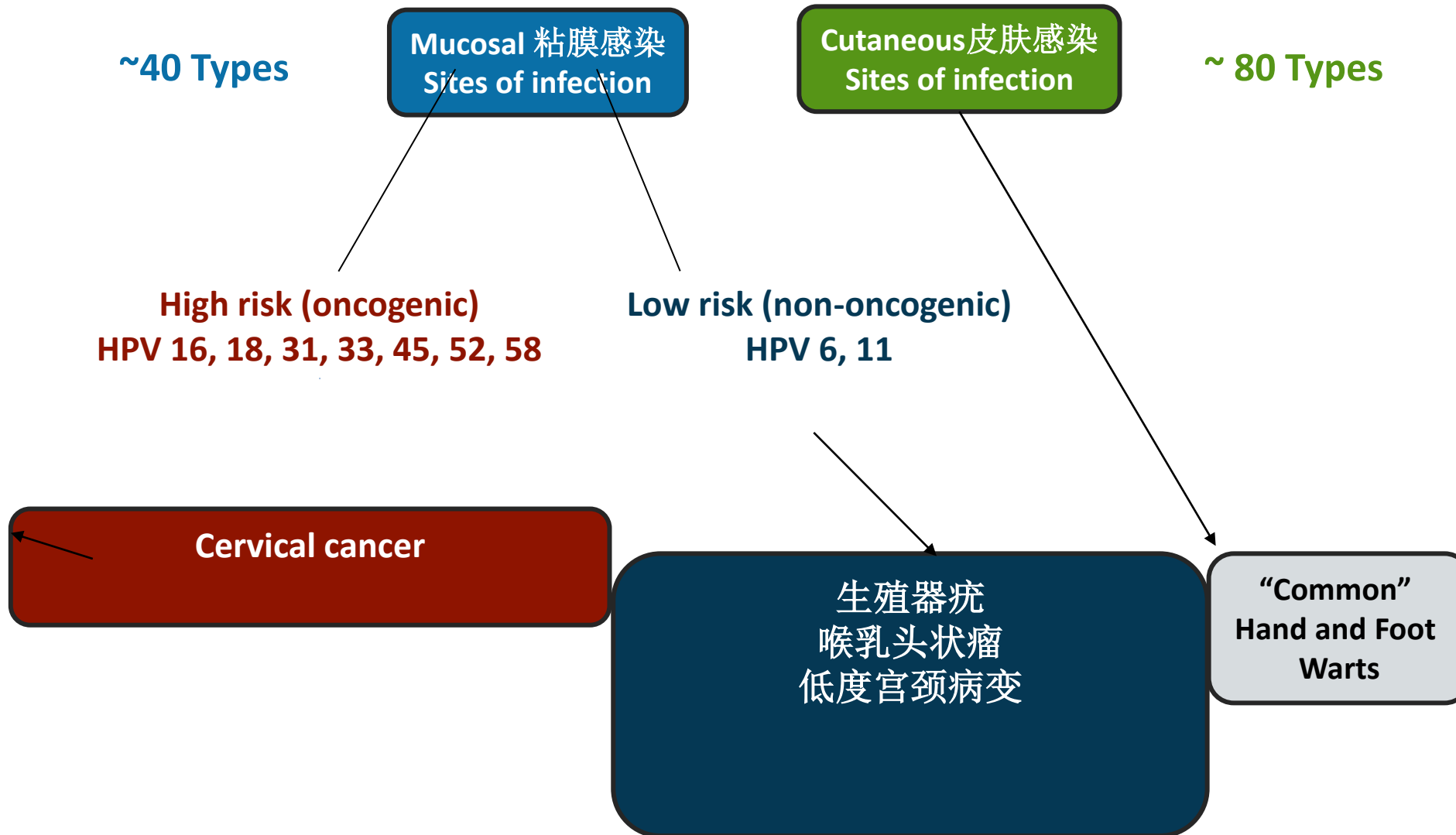
b. 1932

Human Papillomavirus (HPV)

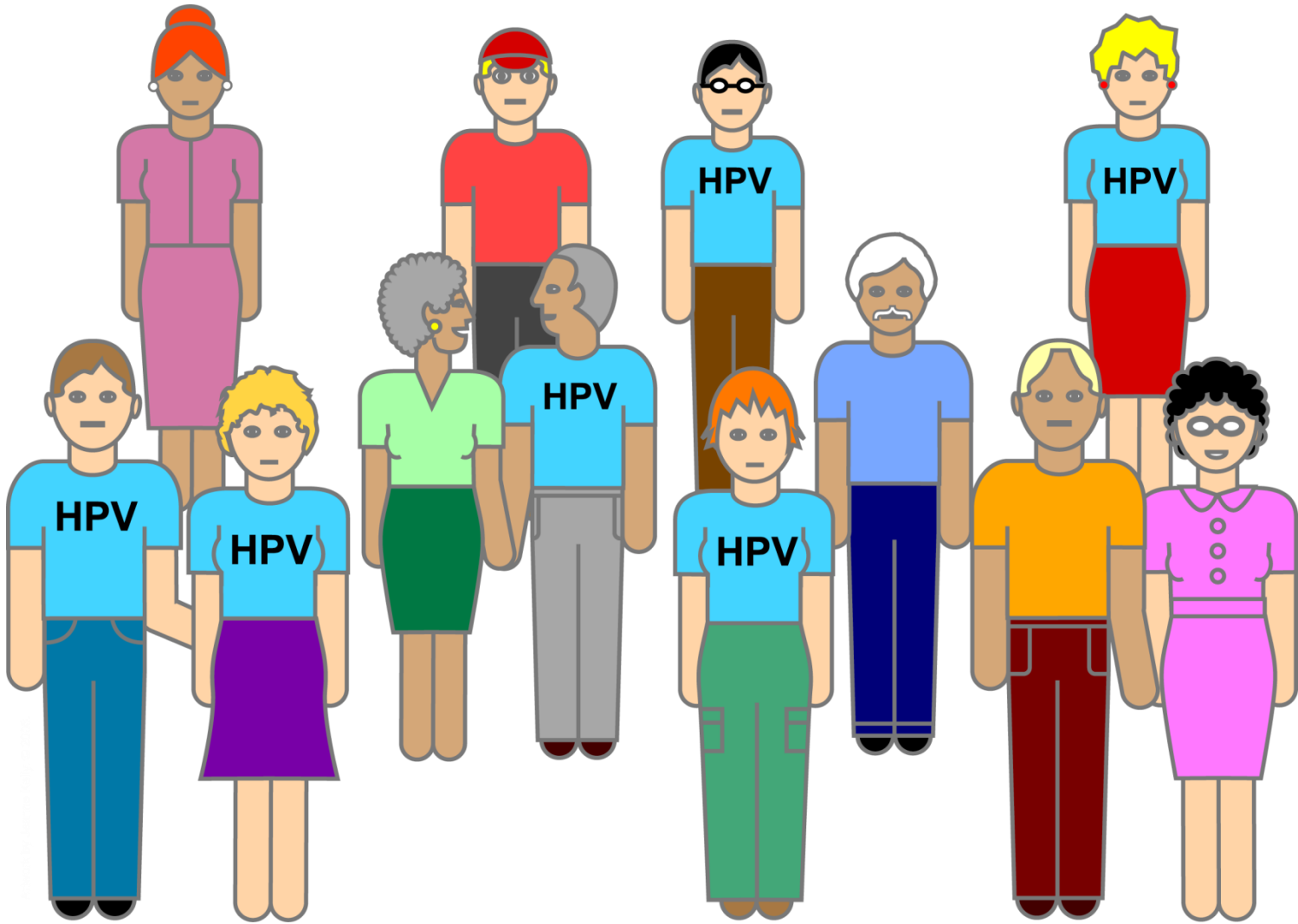


- Over 100 types identified
- Most benign, but 15-20 can cause cancers
- Very common
 - 20,000,000 current cases in US
 - 6,200,000 new cases annually
 - 80% of women have HPV by age 50
 - 50% of college students are infected

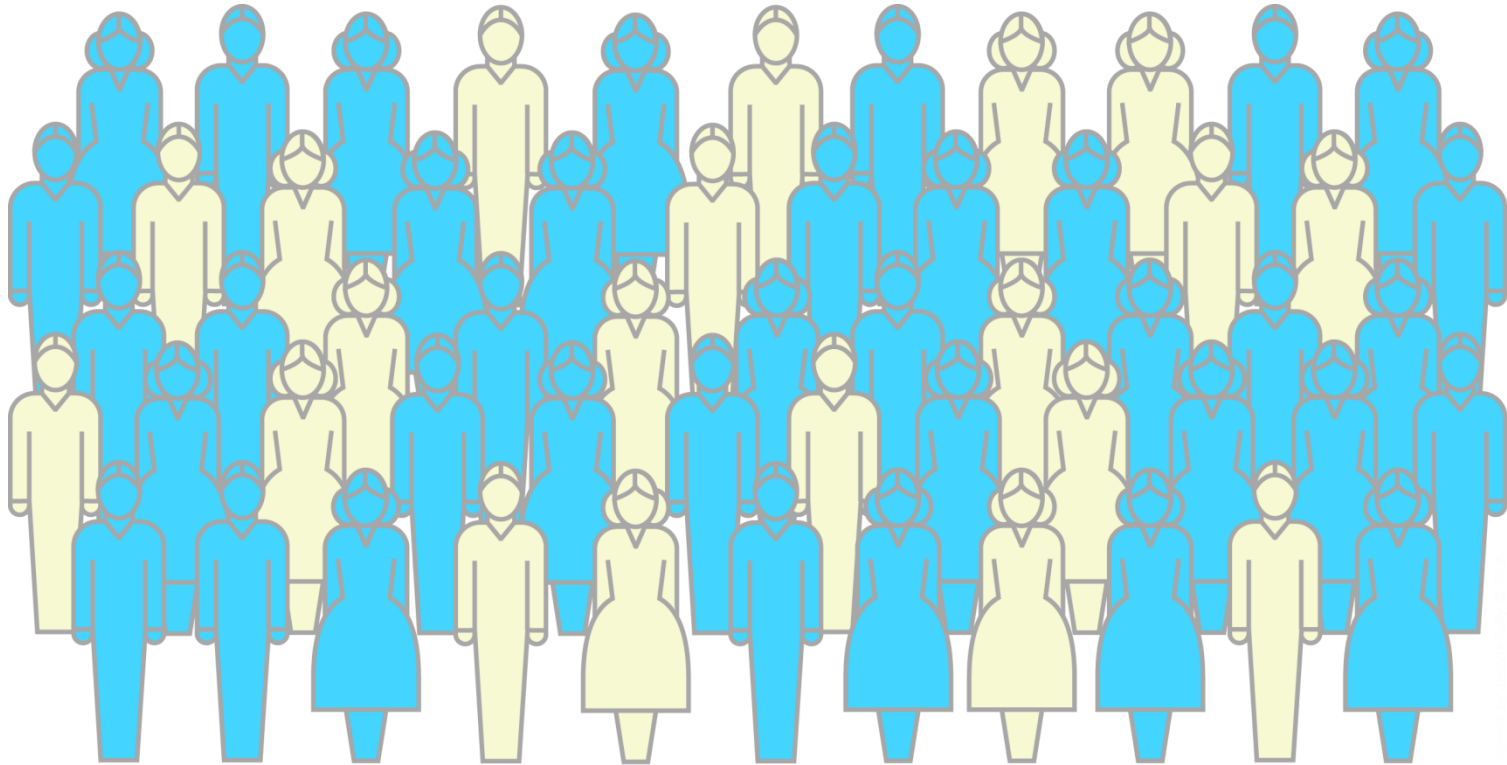
HPV不同型别相关疾病



Infection Is Sexually Transmitted



Common Infection



Cervical intraepithelial neoplasia(CIN)

Pathology

Cervical intraepithelial neoplasia(CIN)

degree CIN I: ie,mild dysplasia,

heterotype cells occupy lower 1/3 layer

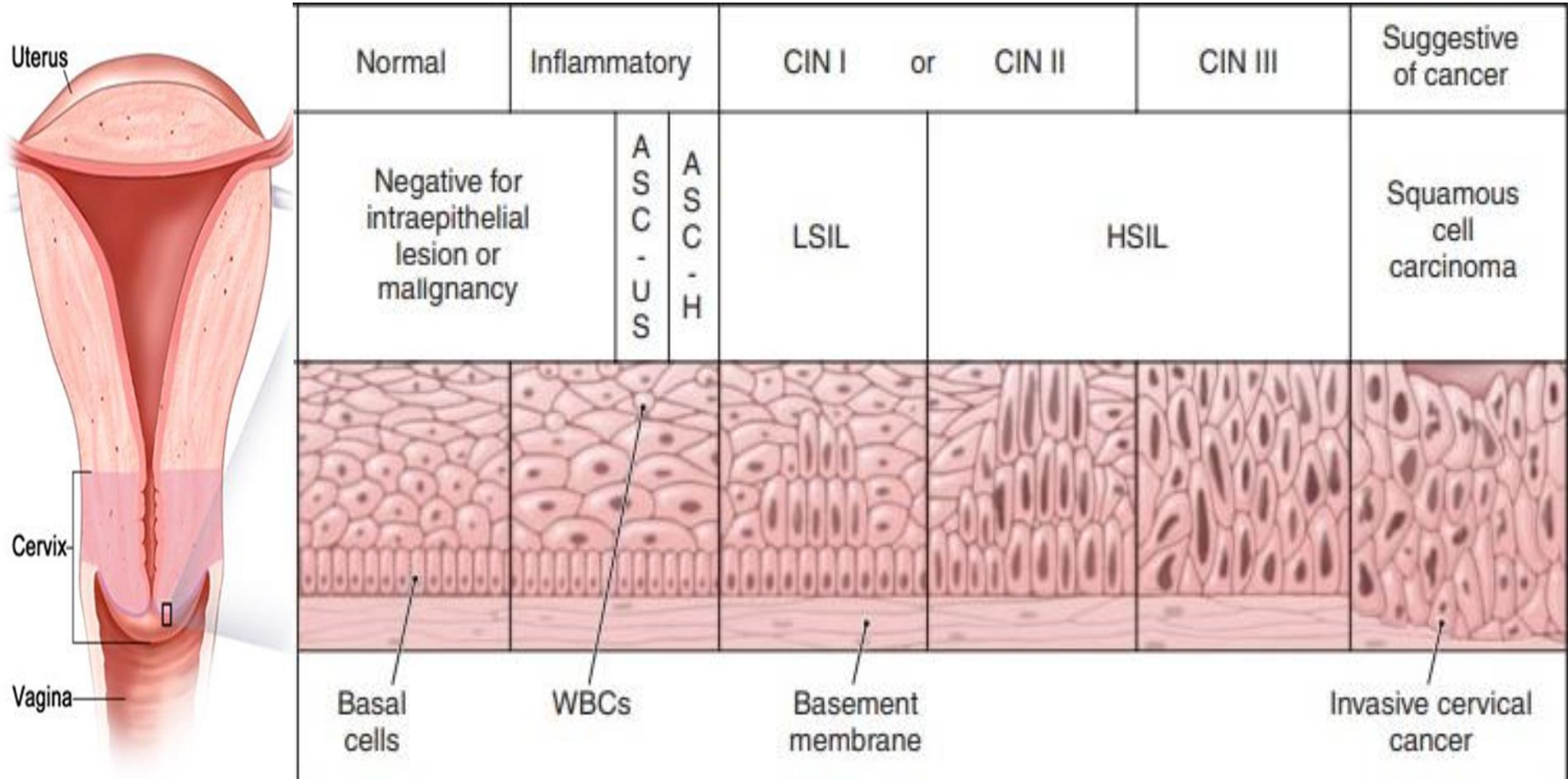
degree II: ie,moderate dysplasia,

heterotype cells occupy the lower 2/3 layer

degree III: ie,severe dysplasia and carcinoma in situ,

heterotype cells occupy whole layer

The classifications of cervical intraepithelial neoplasia (CIN)



No screening at all is the major reason for most cervical cancer Deaths

Saslow D et al. CA Cancer J Clin 2002;52:342-362.

Etiology

- HPV(human papillomaviruses) infection
- Epidemiologic risk factors for CIN:
 - 1,multiple sexual partners
 - 2,high-risk sexual partner
 - 3,early onset of sexual activity(<16)
 - 4,a history of STDs(especially, HPV infection)
 - 5,cigarette smoking
 - 6,immunodeficiency
 - 7,long-tem oral contraceptive pill use

Clinical findings

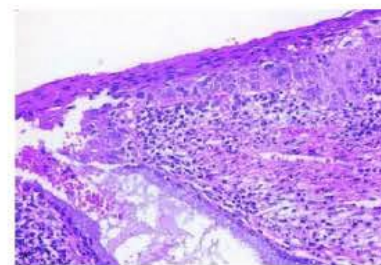
- Usually no symptoms or signs
- Early detection is extremely important

Cervical cancer screening

Primary Screening

Colposcopy and biopsy

Histology



Cytology

Triage

H&E

Cytology-
HPV
Co-testing

Triage of ASC-US
with HPV

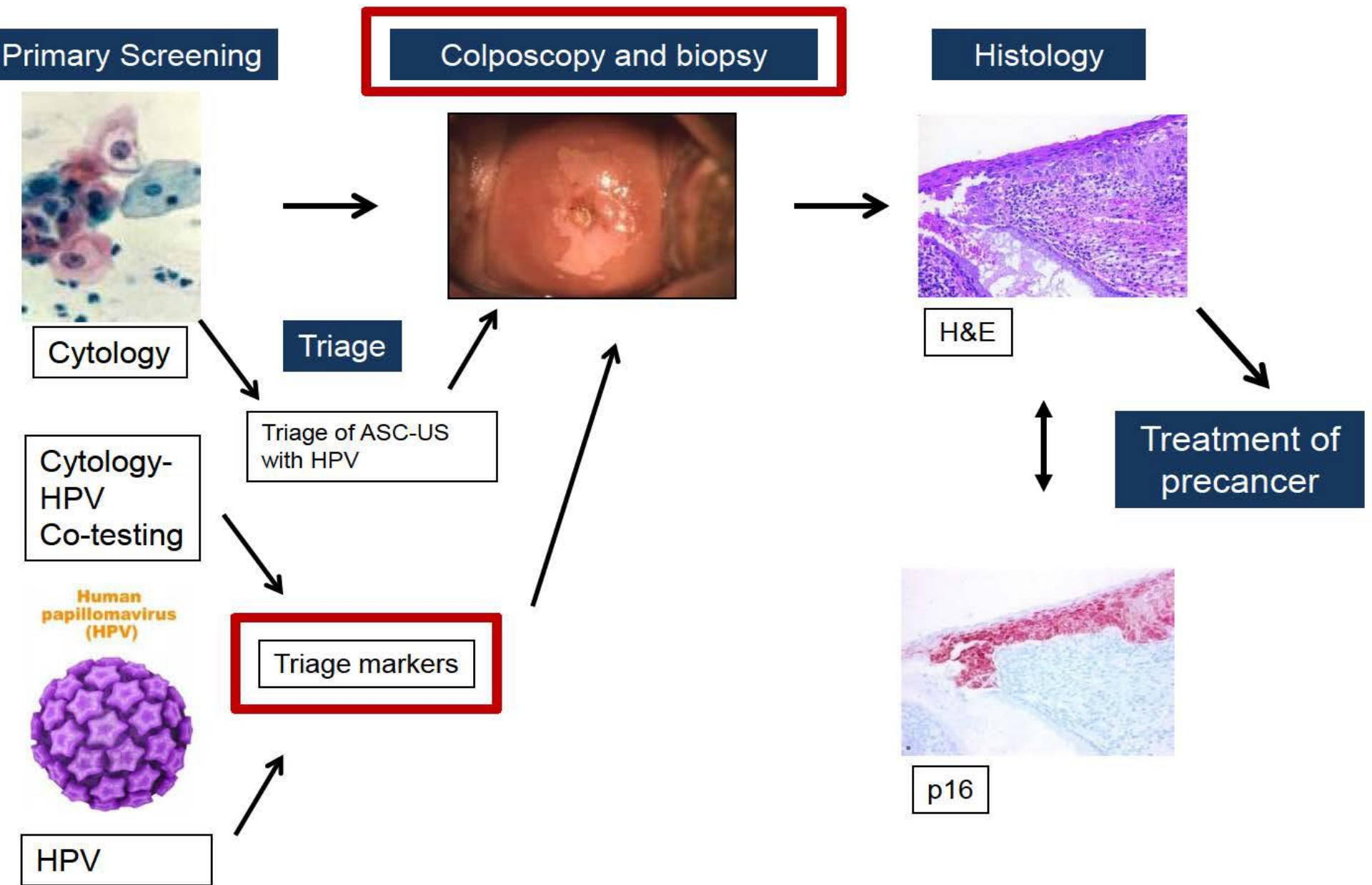
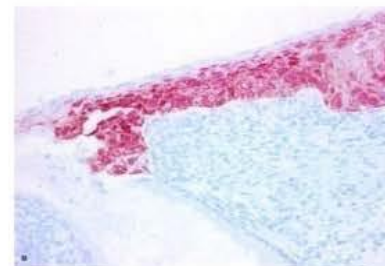
Treatment of
precancer

Human
papillomavirus
(HPV)

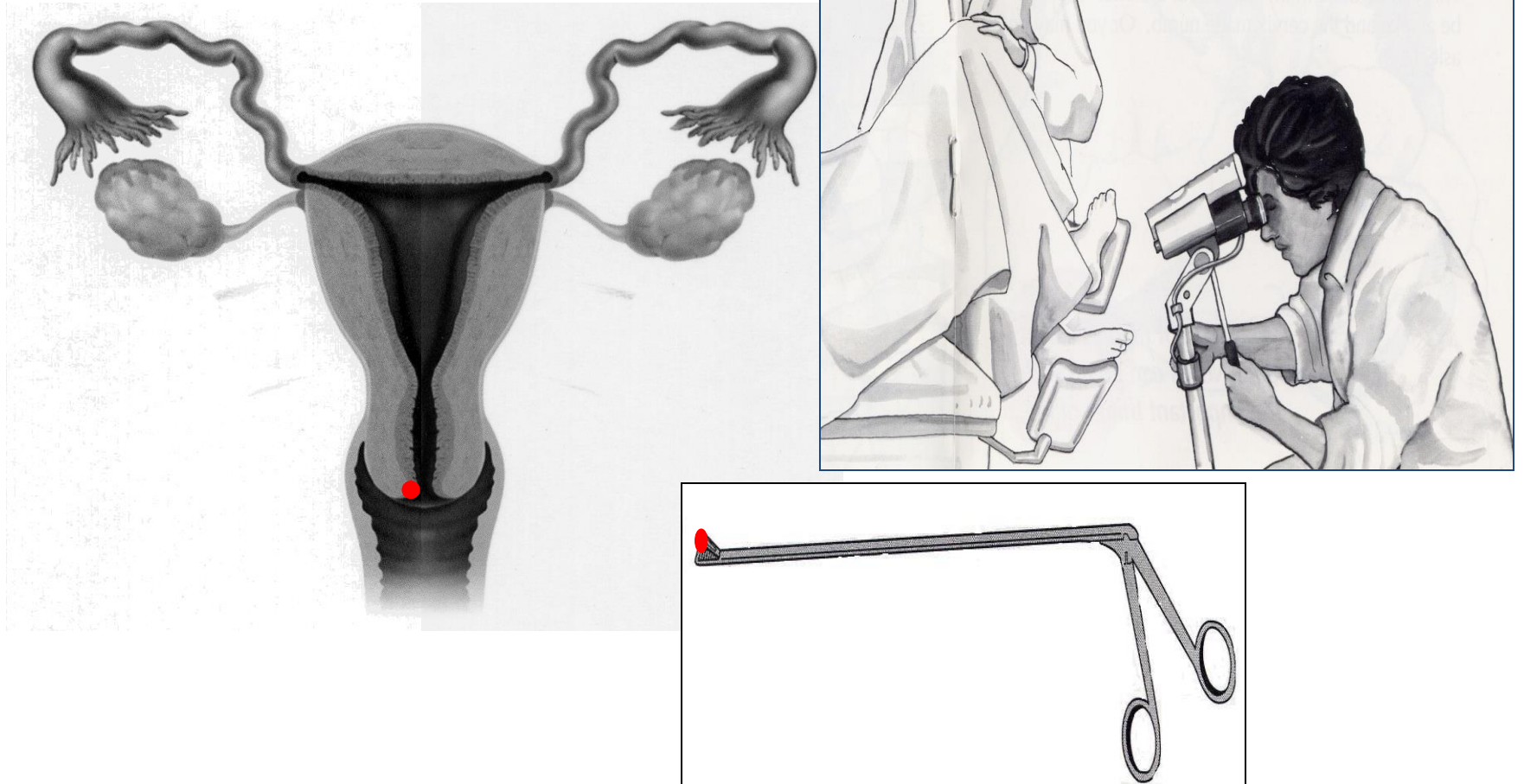
Triage markers

p16

HPV



Biopsy病检



Diagnosis

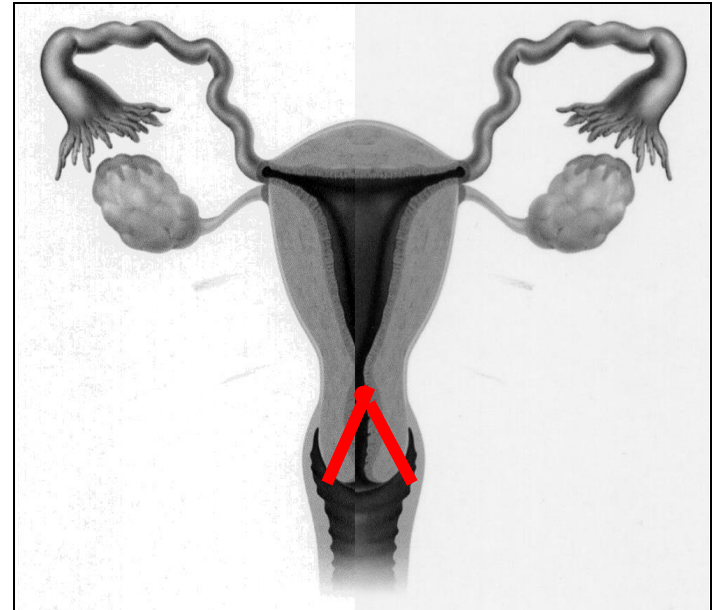
- HPV /TCT
- Colposcopic examination
- Biopsy—the most reliable method to make diagnosis

Treatment

- CIN I: Cryotherapy can be used in small, limited lesions, with an effective rate of 95%. For lesions involving vagina or glands, laser ablation is used with an effective rate of 93%.
- CIN II: Cryotherapy (94% effective rate), laser ablation (92% effective rate) or cone excision can be used according to the range of lesion
- CIN III: Cone excision

What is a cervical conization?

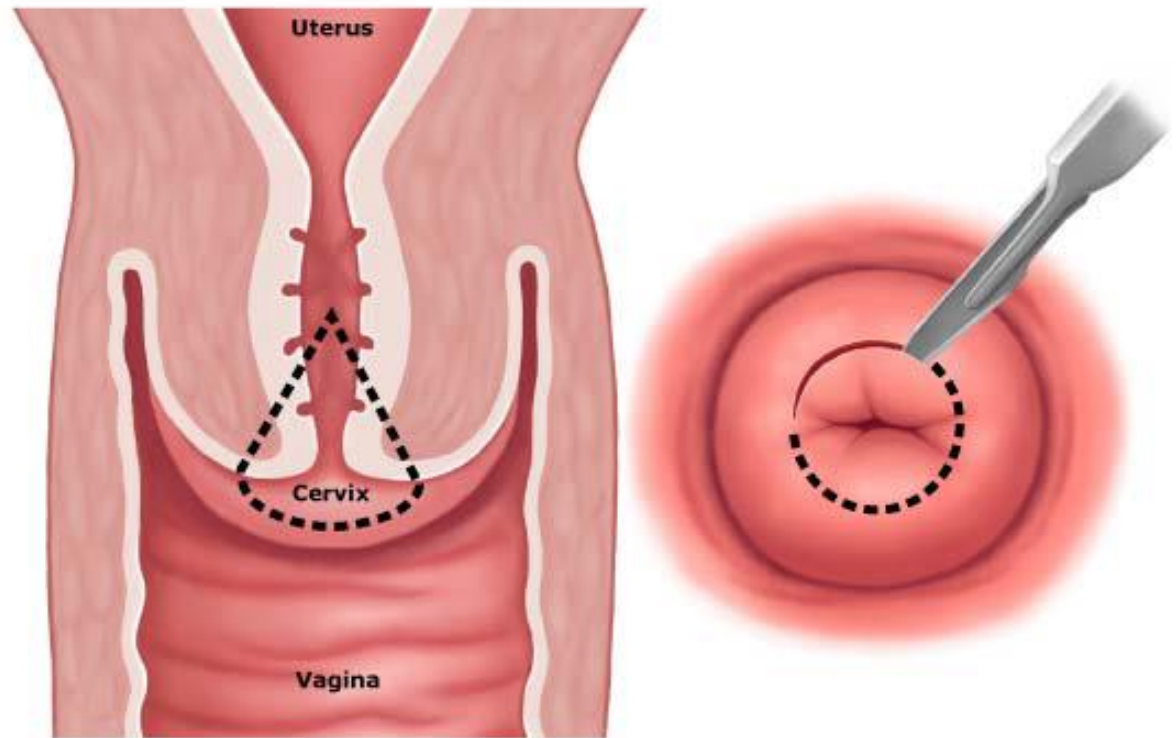
- **Conization:**
 - Removes a cone-shaped piece of tissue
 - Often allows for diagnosis and treatment
 - Performed with local anesthesia in the office or under general anesthesia in the operating room



Source: TAP Pharmaceuticals,
"Female Reproductive Systems."

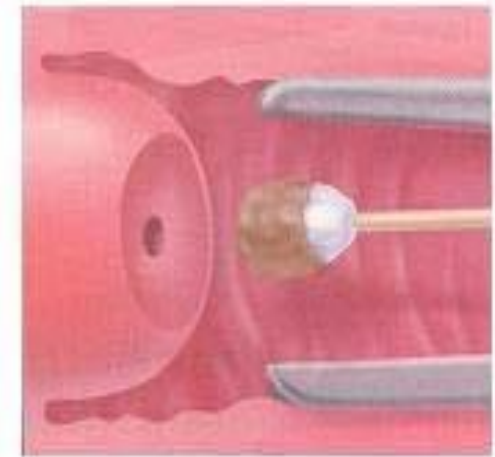
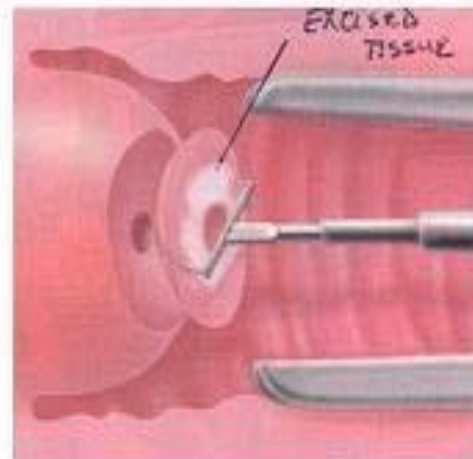
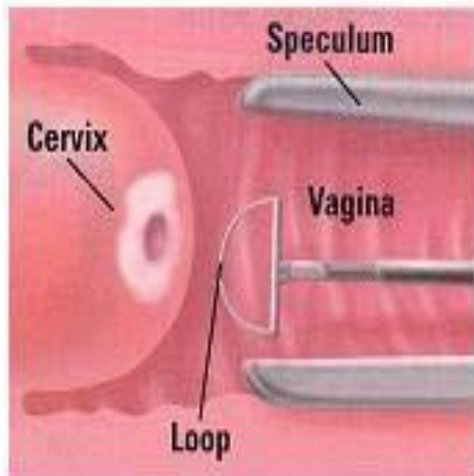
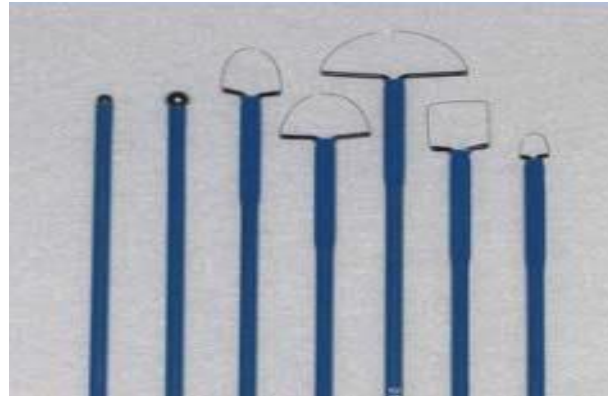
CKC

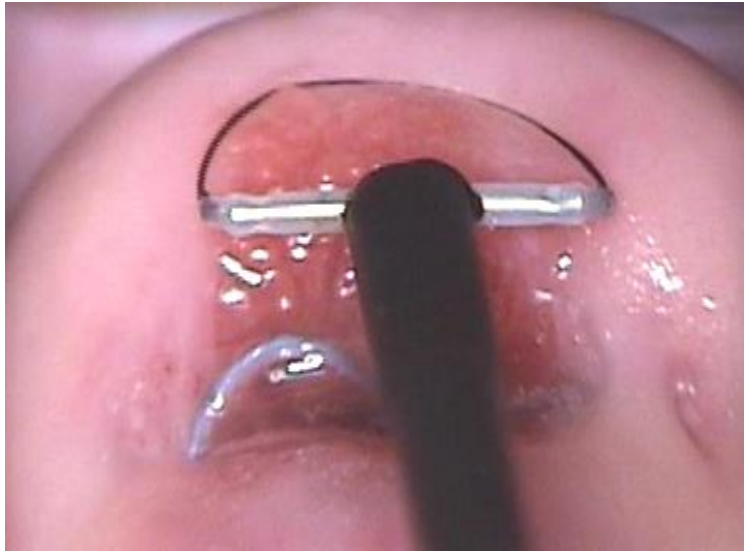
Cone.

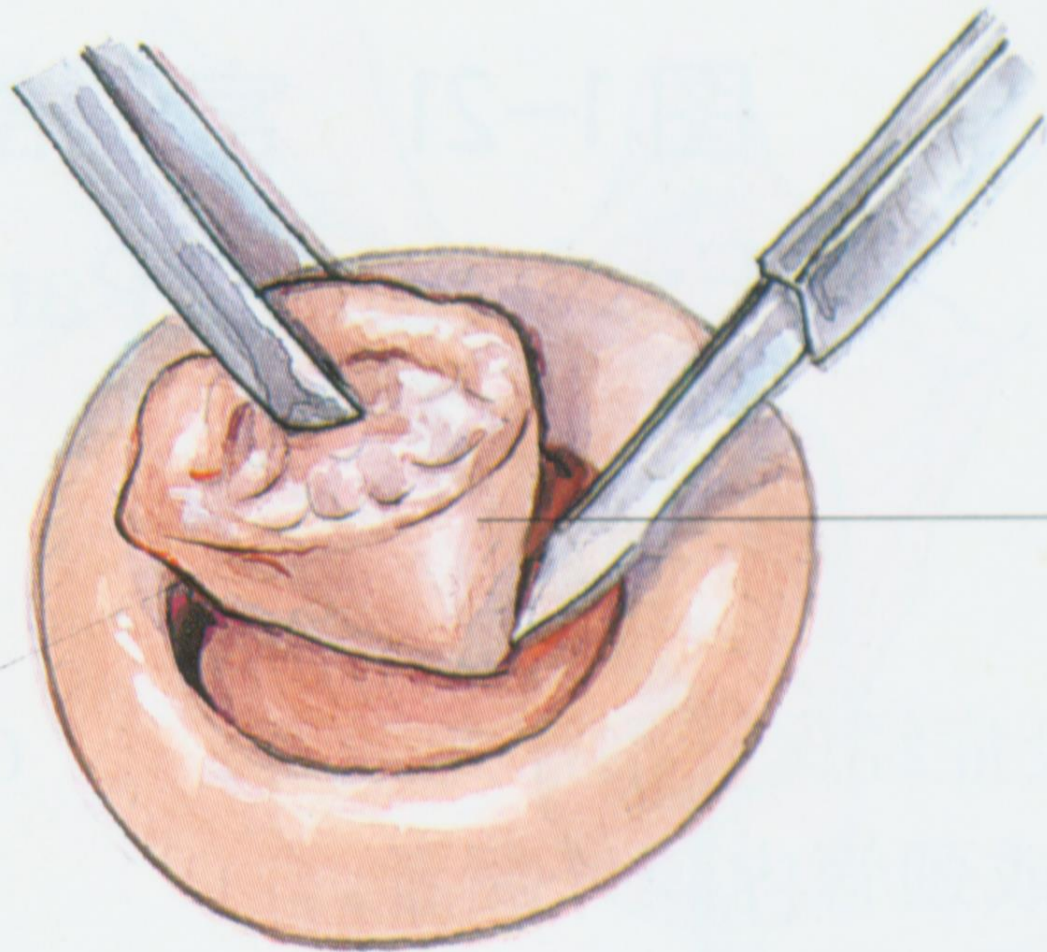


Evolution of treatment

- • **LEEP**







切除部分
the part of excision

奉献

博爱

人道

Thank you

谢谢

Thank you

