



Ecole Supérieure
Polytechnique



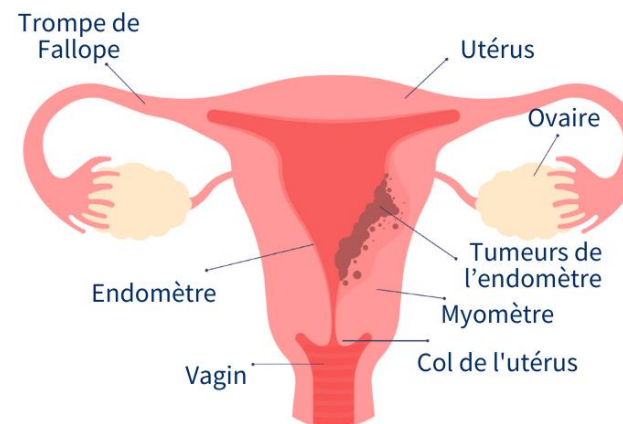
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STAGE TOPIC :

Bio-informatics analysis of public data : Study of
genomics variants associated to **cervicals**
adénocarcinoma

Master

Dr TIBIRI



Probationer

Ian Lucas
KABORE

Plan

Generalities

Symptoms

Diagnostic

**Adénocarcinoma et carcinoma
epidermoïde**

Generalities

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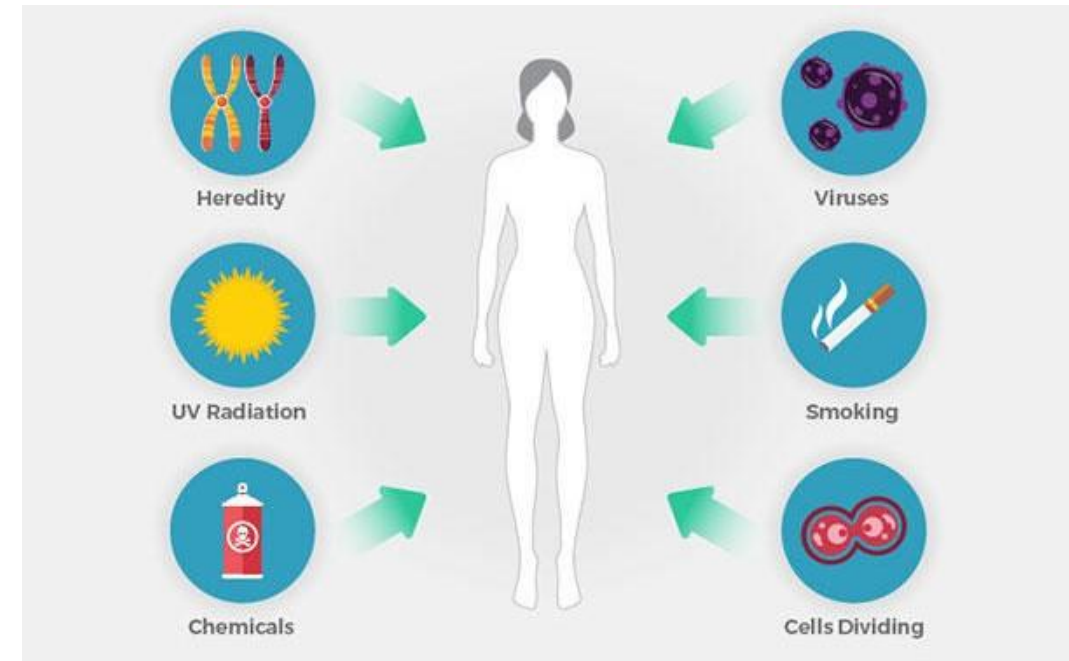
Cancer

Abnormal cell + Excessive proliferation

Uterus



Causes of cancer



Generalities

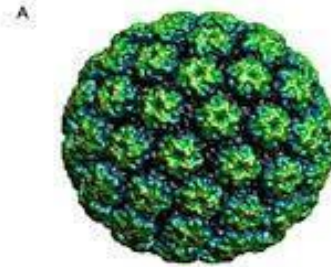
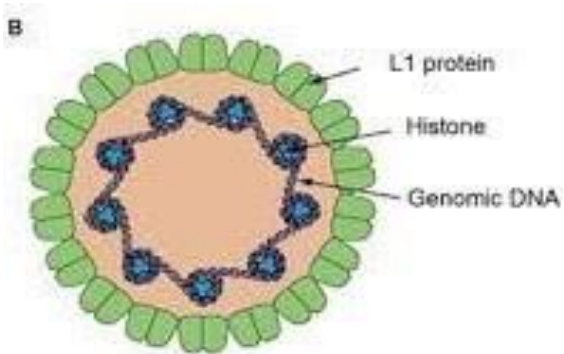
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Virus (HPV)

Circular DNA virus

Non-envelopped virus

Virus à capside icosaédrique



Stades

Stade 1 Micro-invasif cancer

Stade 1A Unseen on bare eye

Stade 1B Seen on bare eye

Stade 2 Proximal expansion

Stade 2A Vaginal extension

Stade 2B Extravaginal extension

Stade 3 Distal expansion

Stade 3A reach 1/3 of the lower of vagina

Stade 3B reach pelvis wall/ ureter

Stade 4 Métastasis

Stade 4A la majority of pelvis and more

Stade 4B other part of the body (lung, liver,
bone ...)

Symptoms

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Hors menstrues

Spontaneous ou provoked par des rapports sexuels

Disorderly menstrual period

1. Vaginal bleeding



3. Pelvis pains

2. Vaginal flow

Diagnostic

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Symptom

and/or

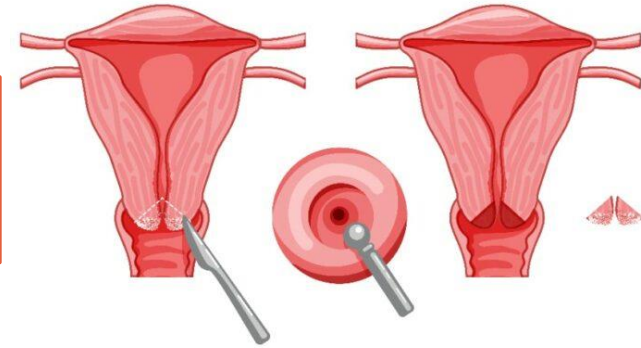
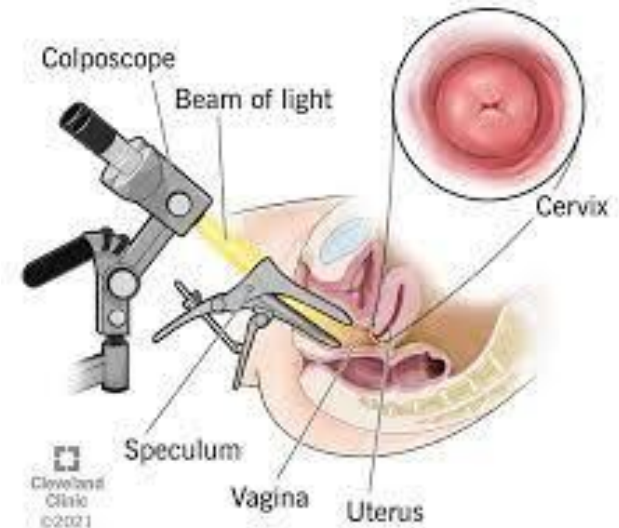
Cervical rubbed
with abnormal
cells

Suspicion of cervix
cancer

Biopsy by **coloscopy**

Biopsy by **conisation**

Colposcopy



Adenocarcinome and carcinome épidermoïde

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Cancer

Solid cancer

Liquid cancer

Metastasic cancer

Secondary cancer

Carcinome

sarcome

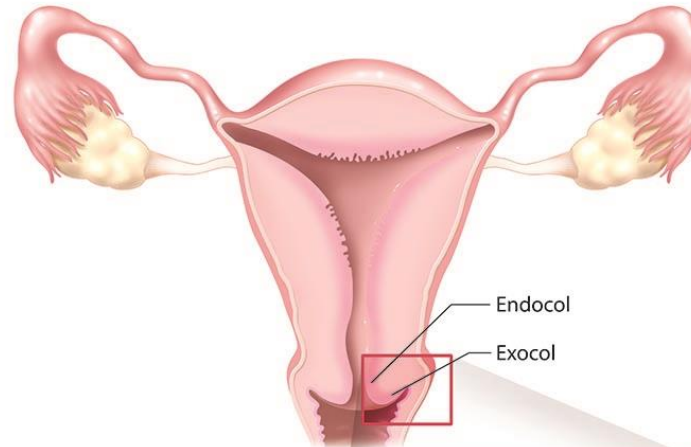
Carcinome épidermoïde

Adénocarcinome

16 18 31 33 34 35 39 45 51 52 56 58 66 68 70

HPV

Cause of cervix cancer



Endocol

Exocol

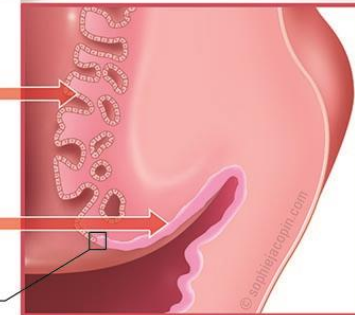
Muqueuse de l'endocol
(muqueuse glandulaire)

Adénocarcinome
(10 à 20 % de cancers)

Muqueuse de l'exocol
(muqueuse malpighienne)

Carcinome épidermoïde
(80 à 90 % de cancers)

Zone de
jonction



Adenocarcinoma and carcinoma épidermoïde

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Why adénocarcinoma ?

Vital pronostic **more deadly**

few information

Augmentation of cases numbers

Majority of genes are associated to non coding area.

That's the problem

Positively regulated genes

CEACAM5 ,TACSTD1 , S100P et **MSLN**

Adénocarcinoma

S100A9 et **ANXA8**

Carcinoma épidermoïde

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adénocarcinoma