

# S1 CLINIQUE

## SEGMENTATION PULMONAIRE , LOBAIRE ET SEGMENTAIRE

# PLAN DU TRAVAIL

## I/ RAPPEL ANATOMIQUE:

1. Poumons et topographie pulmonaire
2. Division tracheo-bronchique

## II/ Techniques d'exploration:

- 1- Radiographie thoracique
- 2- TDM

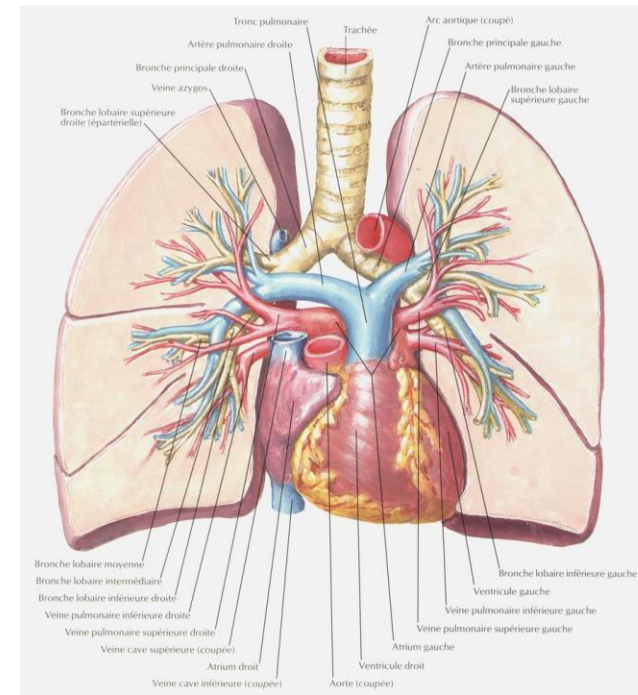
## III/ RESULTATS

- 1- Projection du lobe supérieur droit
- 2- Projection du lobe moyen
- 3- Projection du lobe inférieur droit
- 4- Projection du lobe supérieur gauche
- 5- Projection du lobe inférieur gauche

## IV/ CONCLUSION

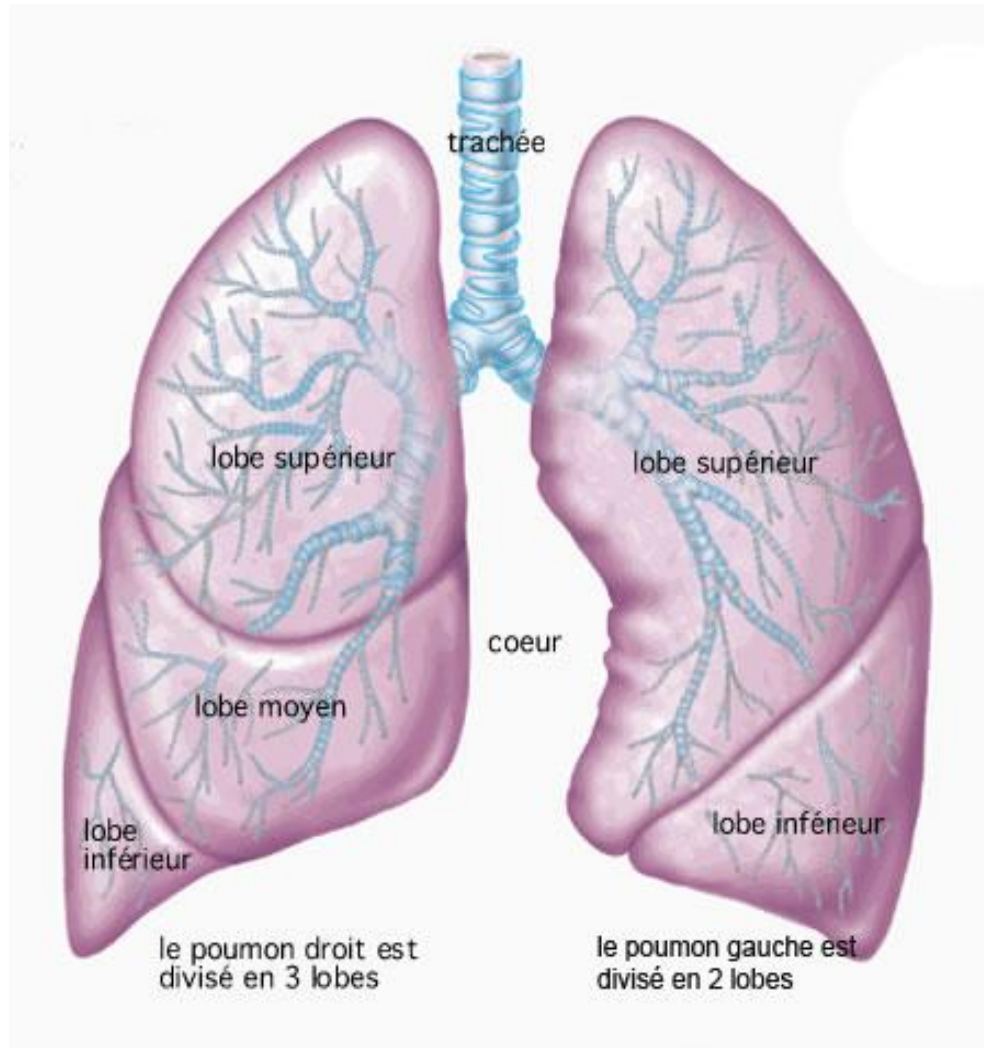
# INTERET

- Localiser une lesion
- Extraire un corps étranger
- Drainage d'un abcès
- Topographie segmentaire de certaines affections,
- Guider Fibroscopie bronchique, biopsie, geste chirurgical.....)



# RAPPEL ANATOMIQUE:

## Poumons et topographie pulmonaire:



# Vues latérales

## Poumon droit

### Lobe supérieur

Apical (S<sup>1</sup>)

Postérieur (S<sup>2</sup>)

Antérieur (S<sup>3</sup>)

### Lobe moyen

Latéral (S<sup>4</sup>)

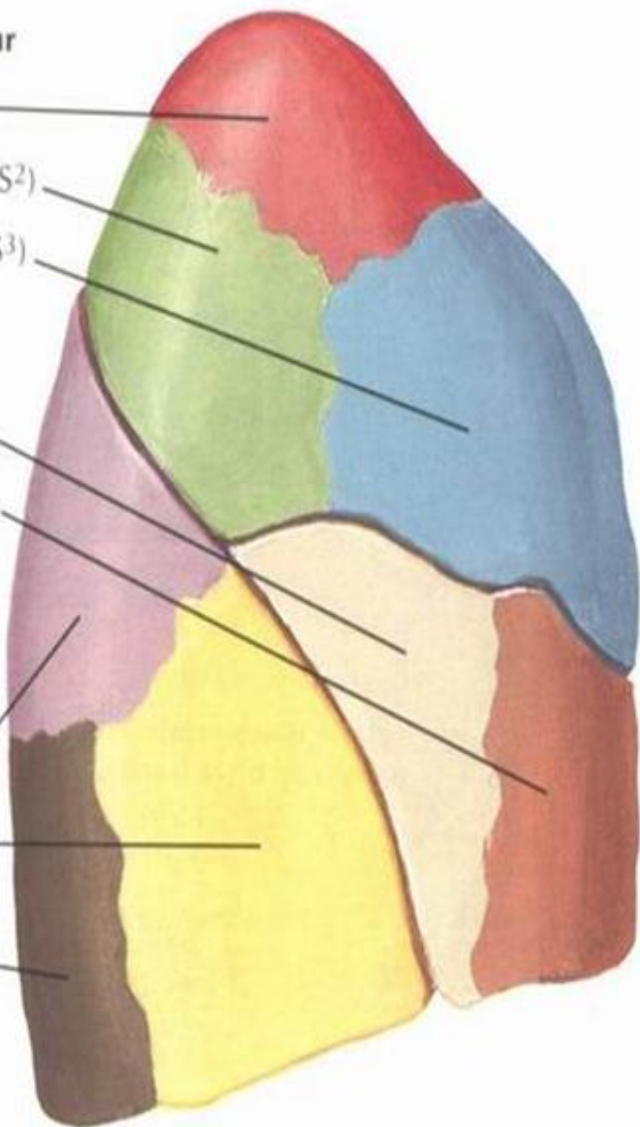
Médial (S<sup>5</sup>)

### Lobe inférieur

Supérieur (S<sup>6</sup>)  
(apical)

Basal  
antérieur (S<sup>8</sup>)

Basal  
latéral (S<sup>9</sup>)



## Poumon gauche

### Lobe supérieur

Apico-  
postérieur  
(S<sup>1+3</sup>)

Antérieur (S<sup>2</sup>)

Supérieur (S<sup>4</sup>)

Inférieur (S<sup>5</sup>)

Segments  
supérieurs  
(culmen)

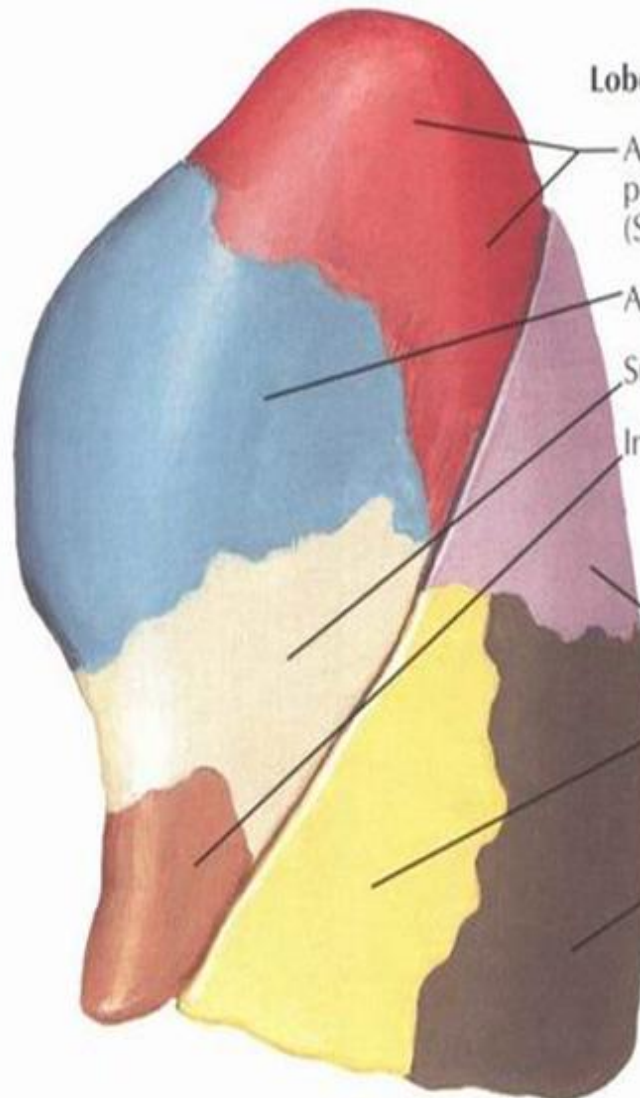
Segments  
lingulaires

### Lobe inférieur

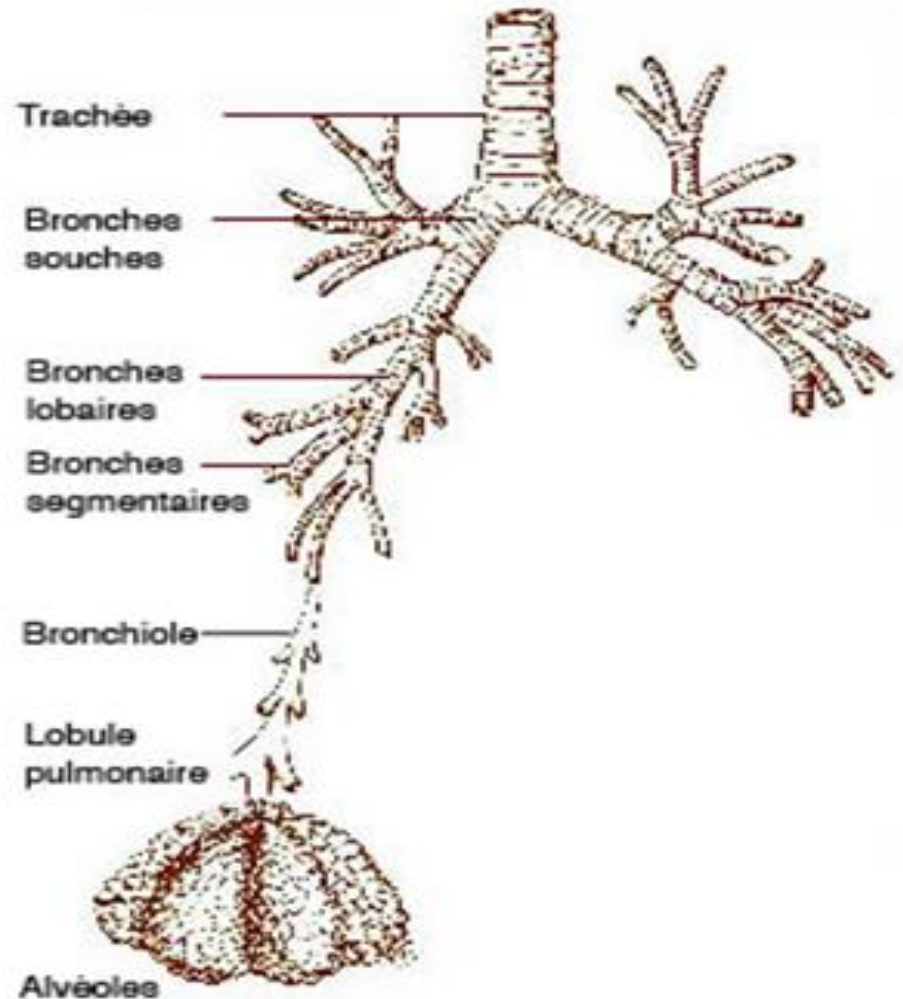
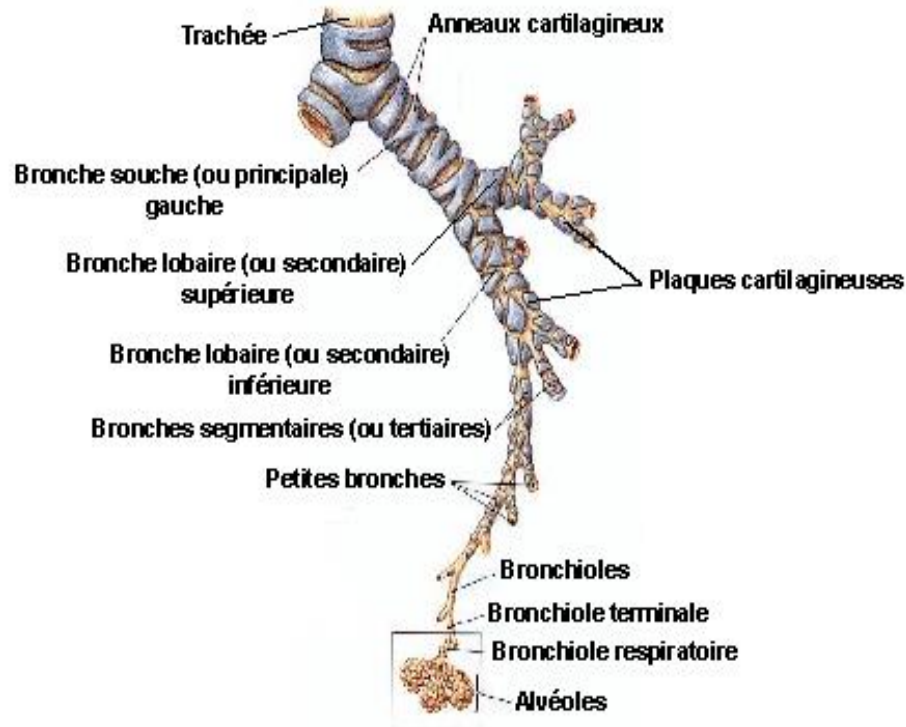
Supérieur (S<sup>6</sup>)  
(apical)

Basal  
antéro-  
médial (S<sup>7+8</sup>)

Basal  
latéral (S<sup>9</sup>)



# Division tracheo-bronchique:





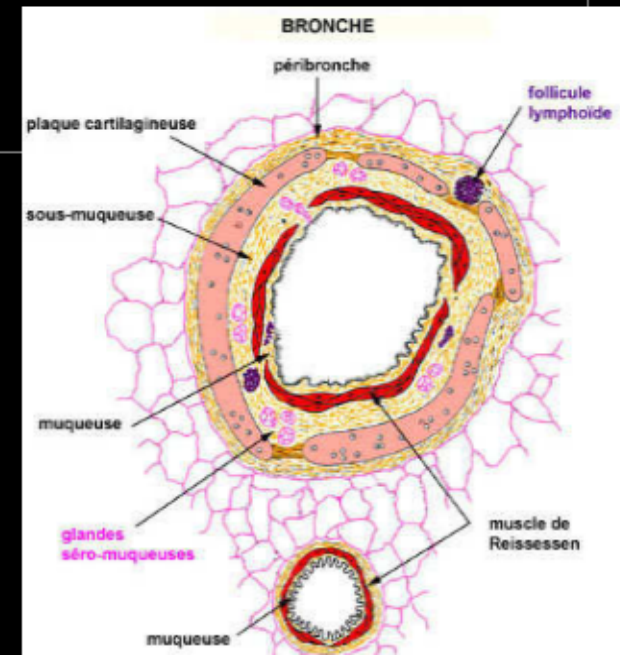
# ANATOMIE de l'ARBRE TRACHEO-BRONCHIQUE

## Trachée

conduit semi rigide anneaux cartilagineux en avant  
membrane fibreuse postérieure  
sous glottique à carène  
diamètre inférieur à 30 mm

## Bronches

cartilage + m. lisse + fibres élastiques  
élastine et collagène alvéoles



# Arbre trachéo-bronchique:

Chaque bronche principale est destinée à un poumon, plus précisément chaque subdivision d'une bronche principale est destinée à la subdivision équivalente du poumon.

On a ainsi :

- bronche principale  $\Leftrightarrow$  poumon
- bronche lobaire  $\Leftrightarrow$  lobe pulmonaire
- bronche segmentaire  $\Leftrightarrow$  segment pulmonaire

Rappel : les bronches segmentaires se divisent en bronches sous-segmentaires qui se divisent elles-mêmes entre 6 et 12 fois pour donner des bronchioles terminales, donnant des conduits alvéolaires allant jusqu'aux alvéoles pulmonaires.



# trachéo-bronchique:

## Les bronches lobaires et segmentaires:

**A droite**, on a trois bronches lobaires car le poumon droit possède trois lobes séparés par deux scissures :

la grande scissure, ou scissure oblique, oblique en bas et en avant

la petite scissure, ou scissure horizontale.

# Arbre trachéo-bronchique:

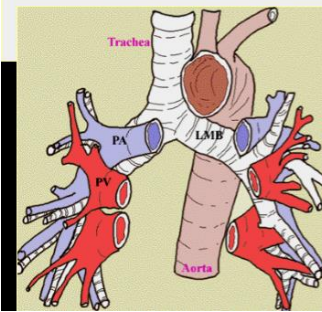
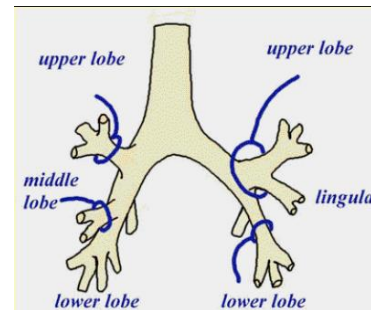
## Les bronches lobaires et segmentaires:

A droite,

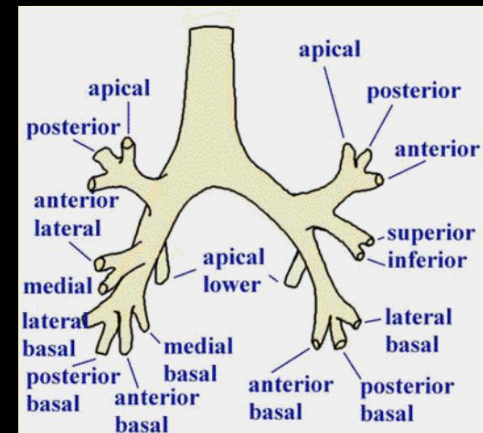
*Bronche lobaire supérieure droite*, qui se divise en trois bronches segmentaires allant vers les segments pulmonaires suivants :

- segment apical = 1
- segment ventral = 2
- segment dorsal = 3

Sous la bronche lobaire supérieure D, la bronche principale devient la bronche intermédiaire jusqu'à la bronche lobaire moyenne.



## Systeme bronchique



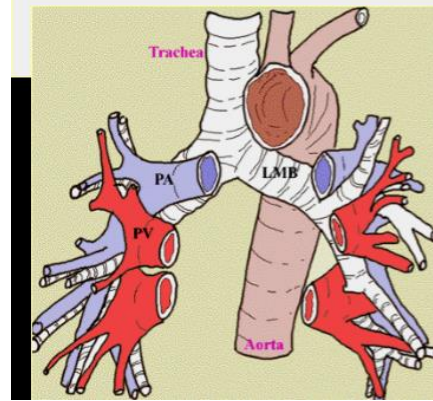
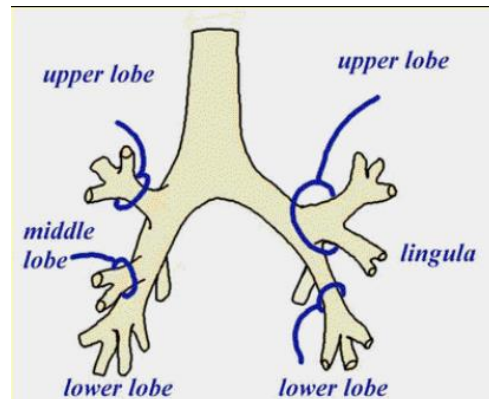
# Arbre trachéo-bronchique:

## Les bronches lobaires et segmentaires:

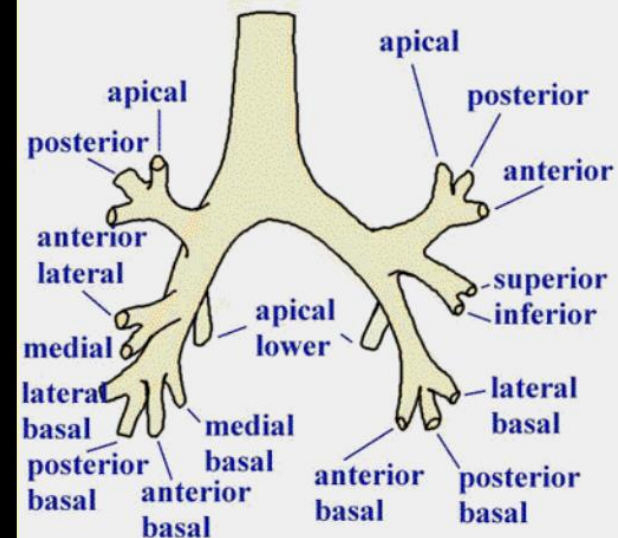
A droite,

-*Bronche lobaire inférieure D*, qui se divise en cinq bronches segmentaires donnant un segment proximal et quatre segments distaux :

segment proximal = segment supérieur du lobe inférieur = segment de Nelson = 6



## Systeme bronchique



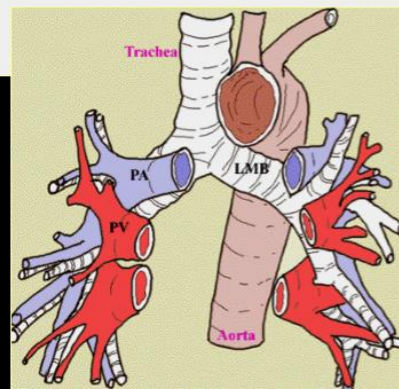
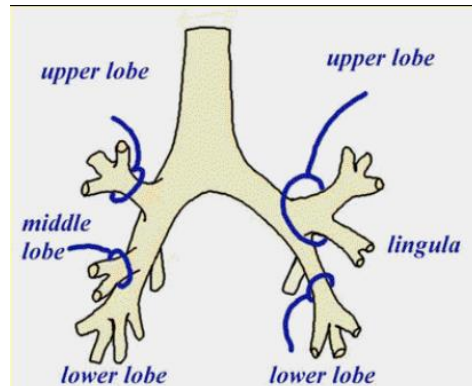
# Arbre trachéo-bronchique:

## Les bronches lobaires et segmentaires:

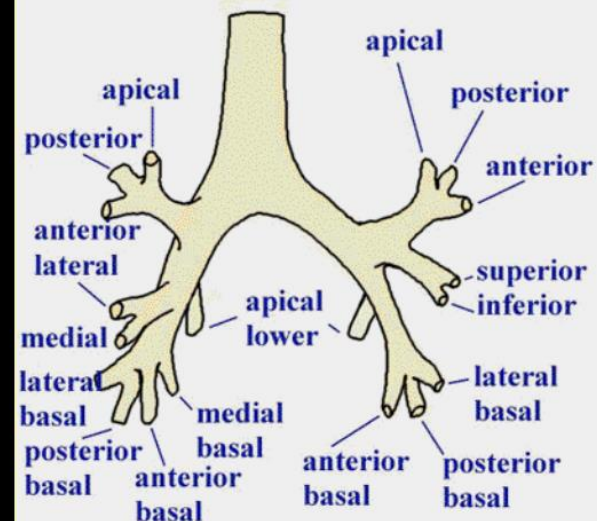
A droite,

*-Bronche lobaire inférieure D:*

- segment médio-basal ou paracardiaque = 7
- segment antero-basal = 8
- segment latéro-basal = 9
- segment postero-basal = 10



## Systeme bronchique



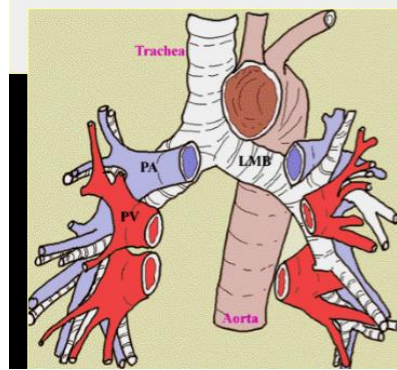
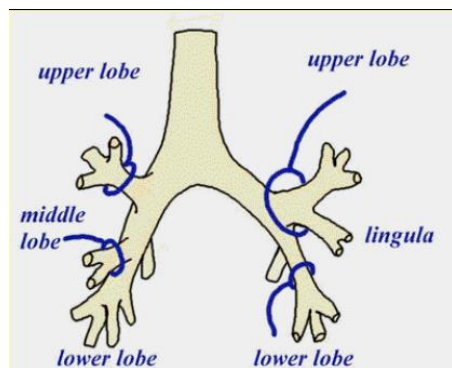
# Arbre trachéo-bronchique:

## Les bronches lobaires et segmentaires:

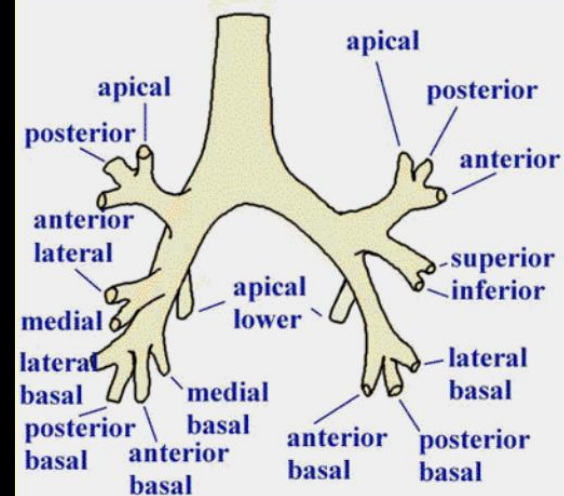
A gauche, on a les deux bronches lobaires suivantes:

-*Bronche lobaire supérieure G*, qui se divise en deux troncs :

- tronc supérieur = culmen = tronc culminal donnant deux bronches segmentaires: apico- dorsale (B1+B3) et ventrale (B2).
- tronc inférieur = lingula = tronc lingulaire qui donne deux bronches segmentaires supérieure (B4) et inférieure (B5).



## Systeme bronchique



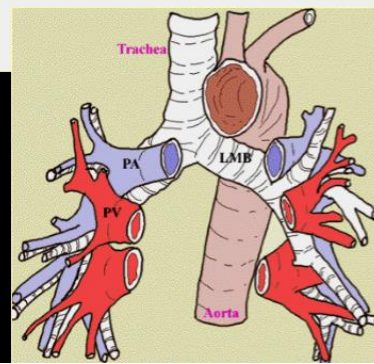
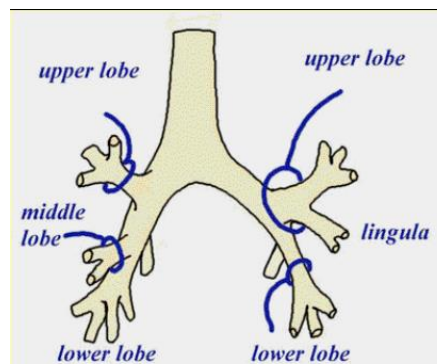


# Arbre trachéo-bronchique:

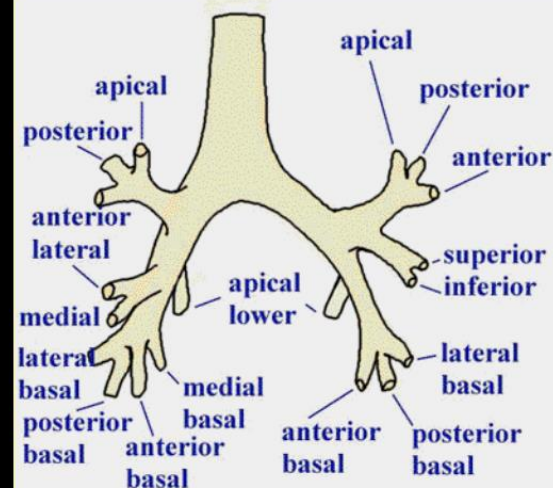
## Les bronches lobaires et segmentaires:

-*Bronche lobaire inférieure G*, qui donne:

- bronche du Nelson (B6), qui naît plus ou moins haut.
- tronc ventroparacardiaque (B7+B8) commun aux bronches segmentaires medio basale (B7) et antero-basale (B8).
- tronc terminobasal commun aux bronches segmentaires latero-basale (B9) et postero-basale (B10)



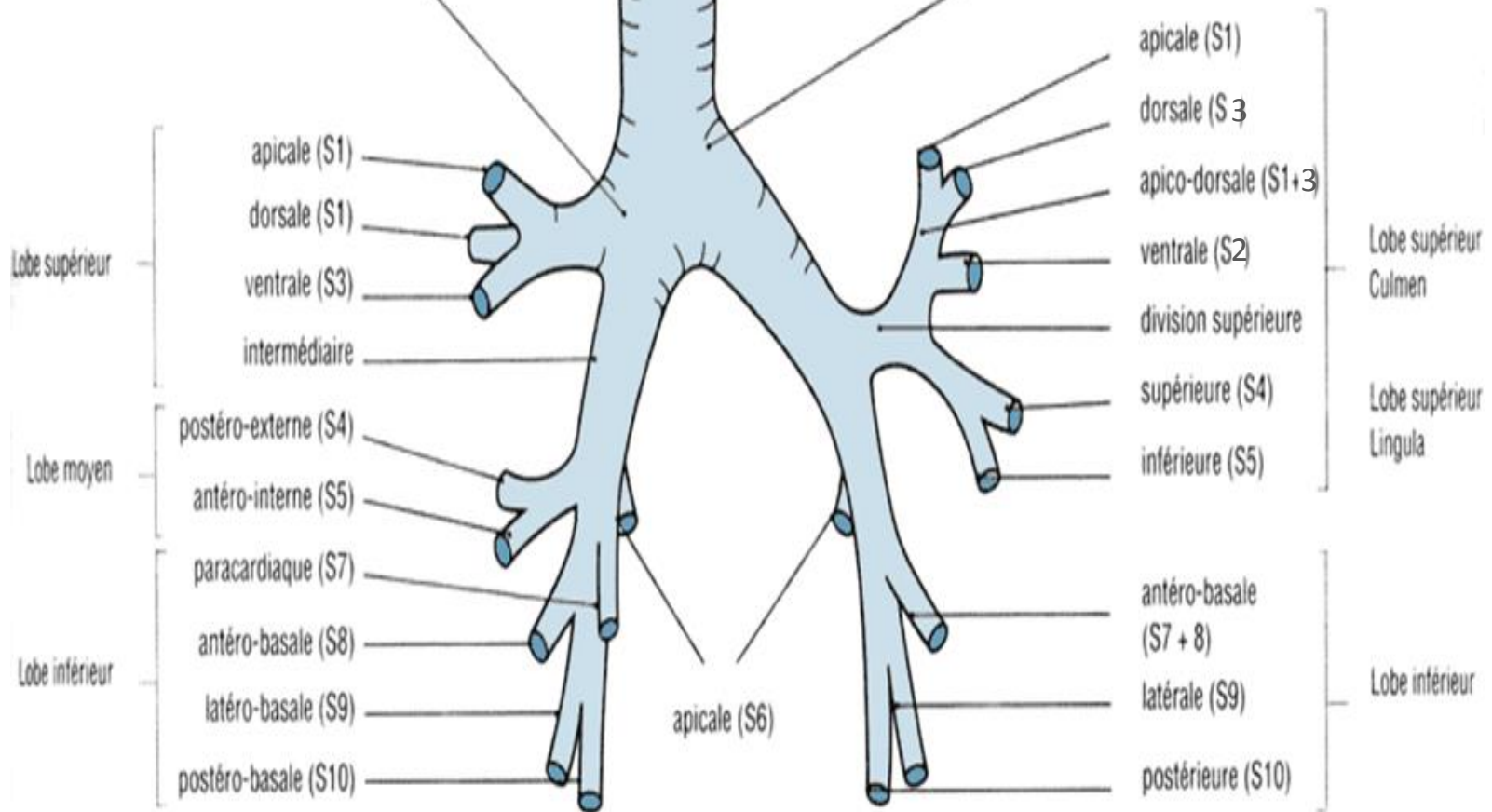
## Systeme bronchique



trachée

Tronc souche droit

Tronc souche gauche





## II/ Techniques d'exploration:

### Radiographie thoracique:

*Incidences radiographiques et aspects normaux:*

**incidence de face**

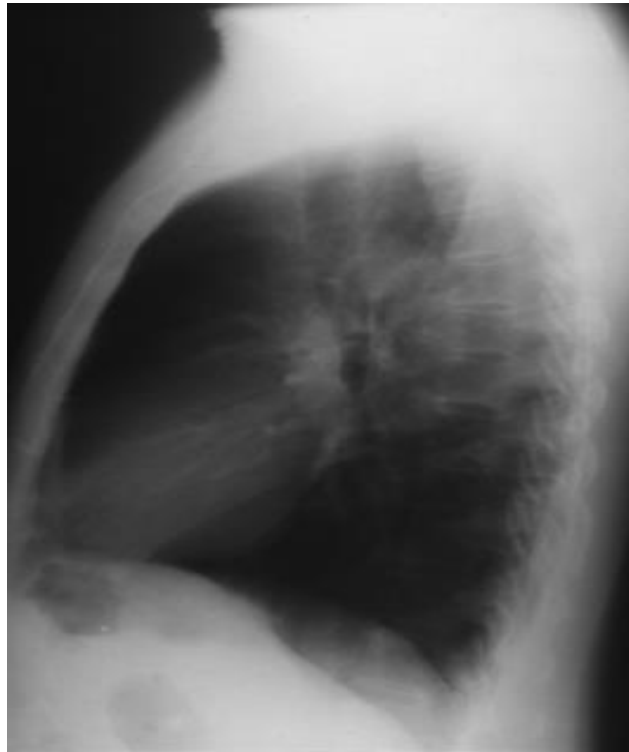


## II/ Techniques d'exploration:

### 1-Radiographie thoracique:

*Incidences radiographiques et aspects normaux:*

**incidence de profil:**



## Trachée - Carène

**BSD : Bronche souche droite ou bronche principale droite**



**LSD : Lobaire supérieure droite**

- 1-Apicale
- 2-Ventrale
- 3-Dorsale

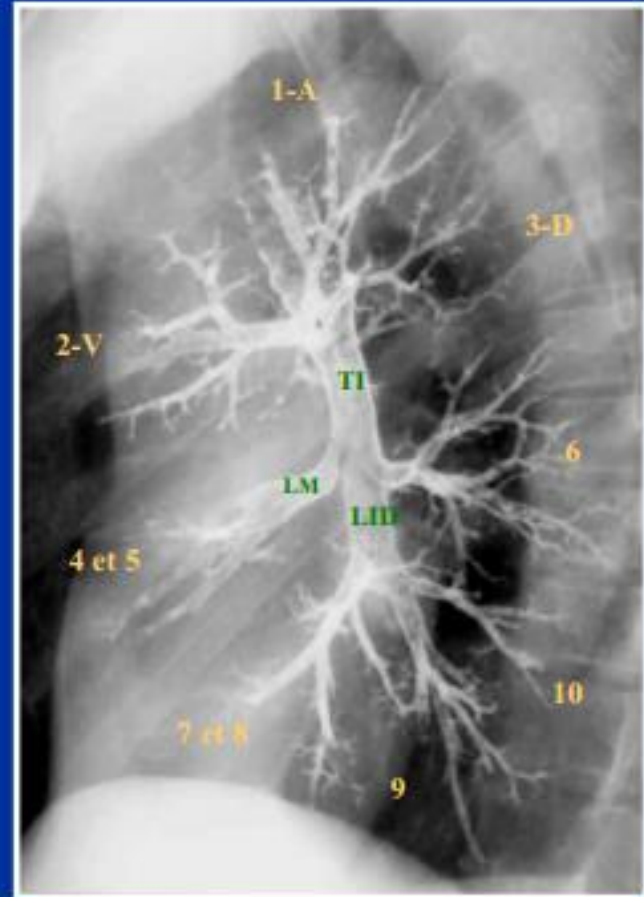
**Tronc Intermédiaire**

**LM : lobaire moyenne**

- 4-Postéro-Ext / Latérale
- 5-Ant-Int / Médiale

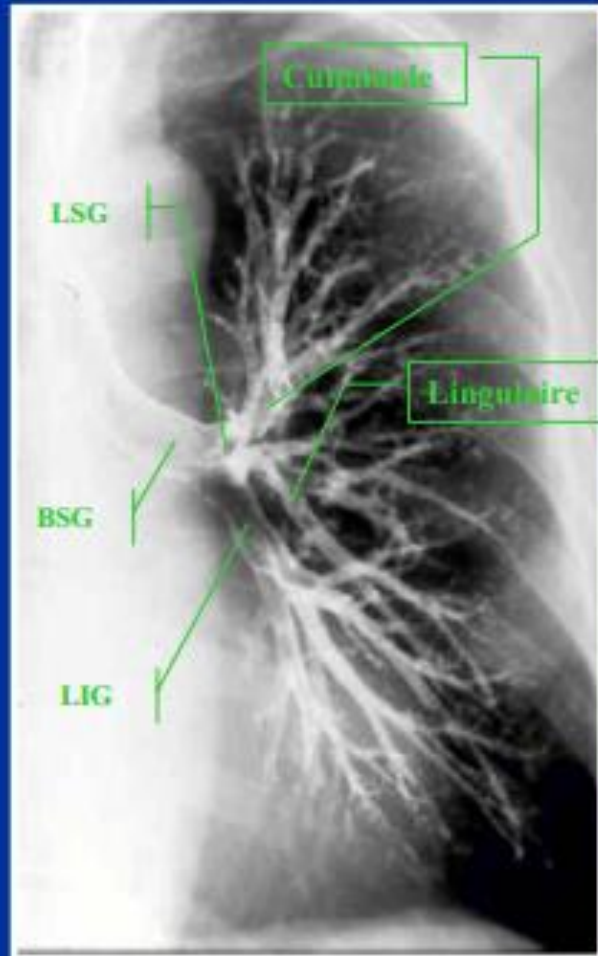
**LID : Lobaire inférieure droite**

- 6- Apicale / Nelson
- 7- Paracardiaque
- 8- Ventro-basale
- 9- Latéro-basale
- 10- Dorso-basale



## Trachée - Carène

**BSG : Bronche souche gauche ou bronche principale gauche**



**LSG : Lobaire supérieure gauche**

**Culminale**

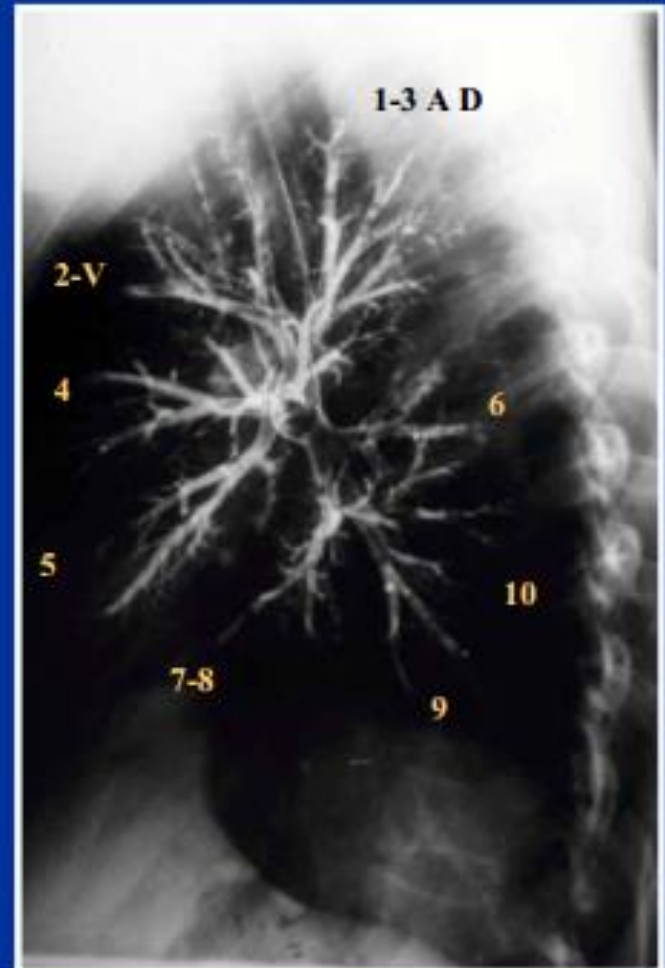
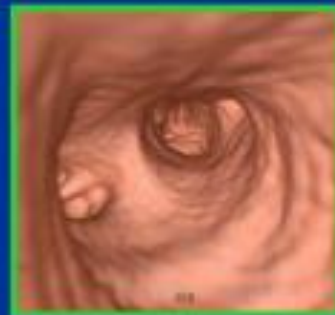
- 1-3 Apico-dorsale
- 2-Ventrale

**Lingulaire**

- 4-supérieure
- 5-inférieure

**LIG : Lobaire inférieure gauche**

- 6- Apicale / Nelson
- 7-8- Ventro-Paracardiaque
- 9- Latéro-basale
- 10- Dorso-basale

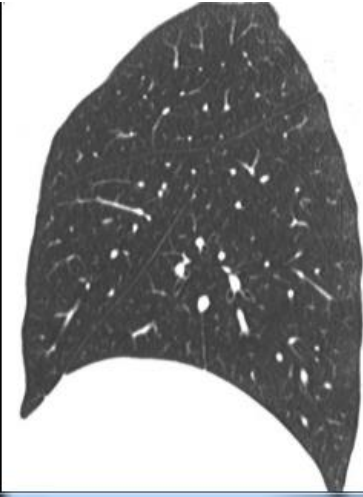


## II/ Techniques d'exploration:

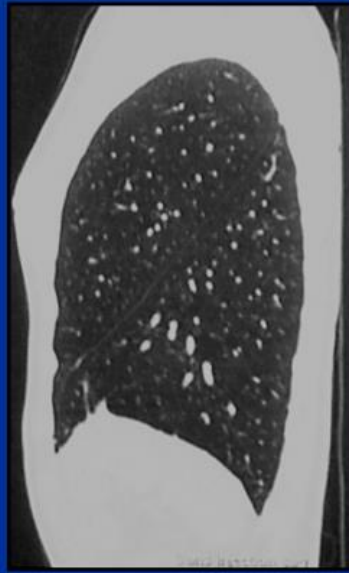
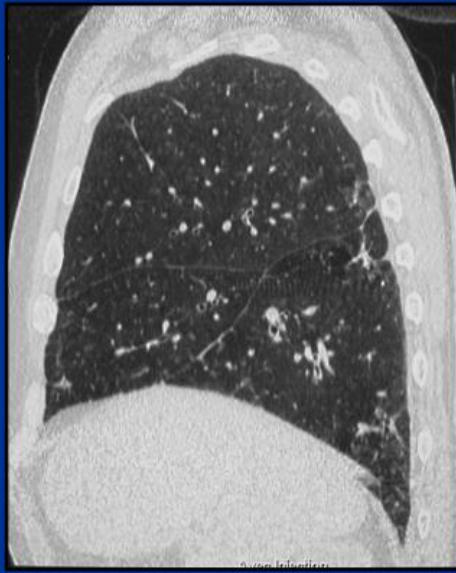
### 2-TDM :

- Technique de choix pour l'étude du poumon en particulier.
- Coupes de 2 mm d'épaisseur avec des filtres de reconstruction favorisant les résolutions spatiales, pour le parenchyme pulmonaire.





**MPR : Multi Planar Reformation => Reconstruction sagittale**



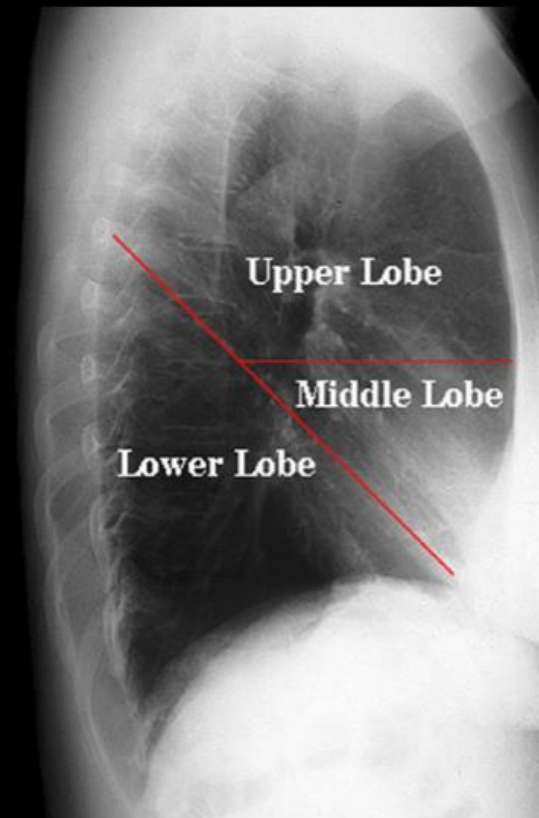
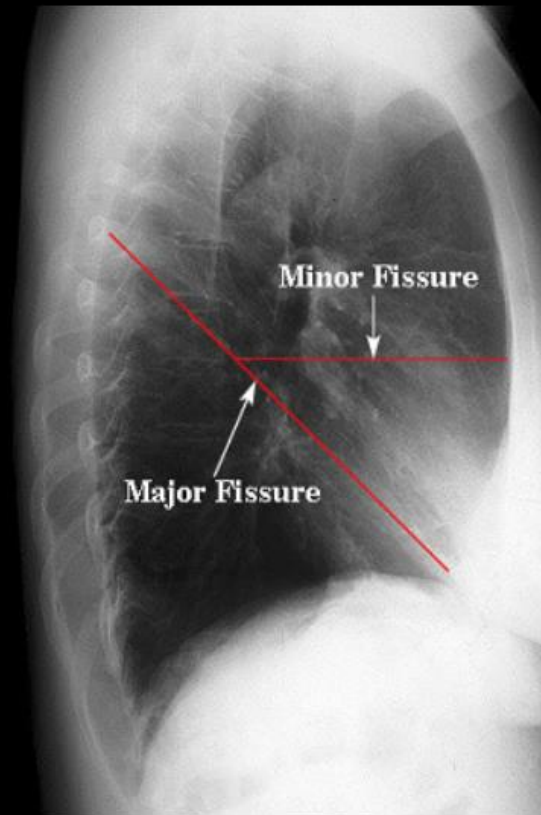


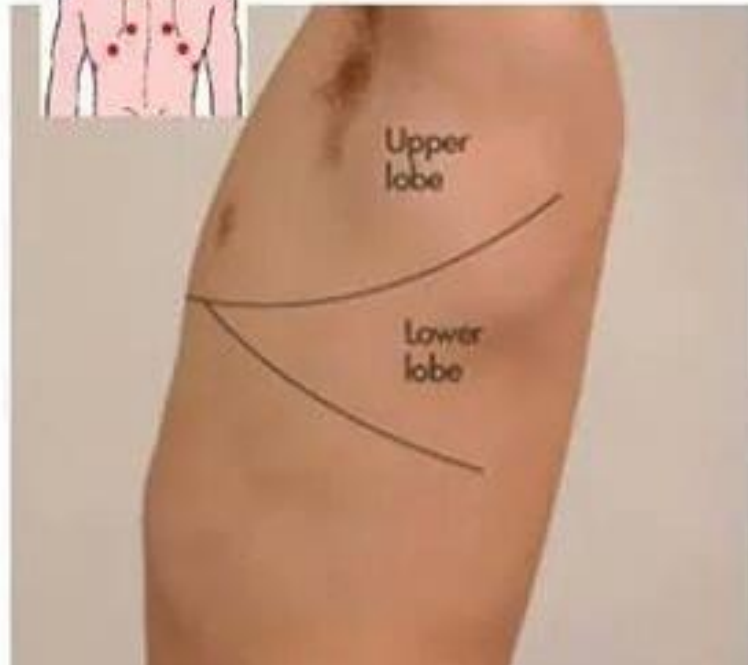
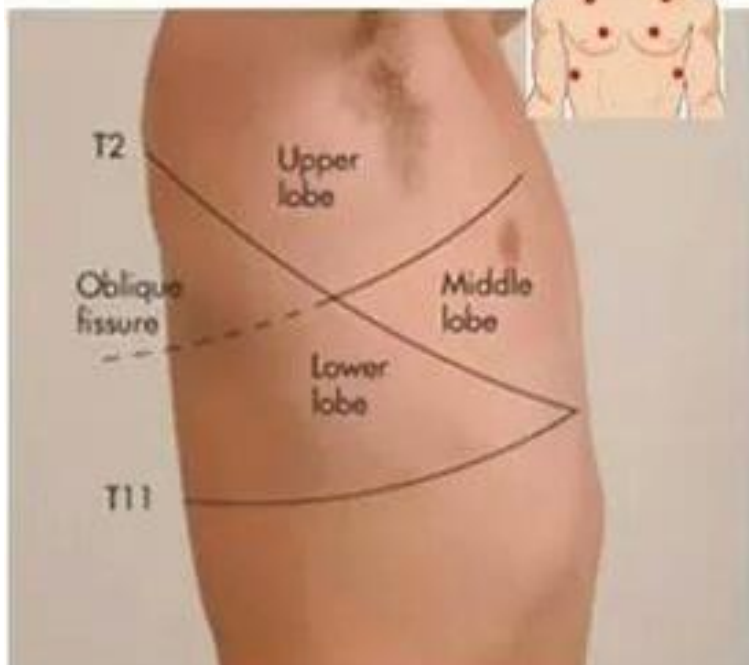
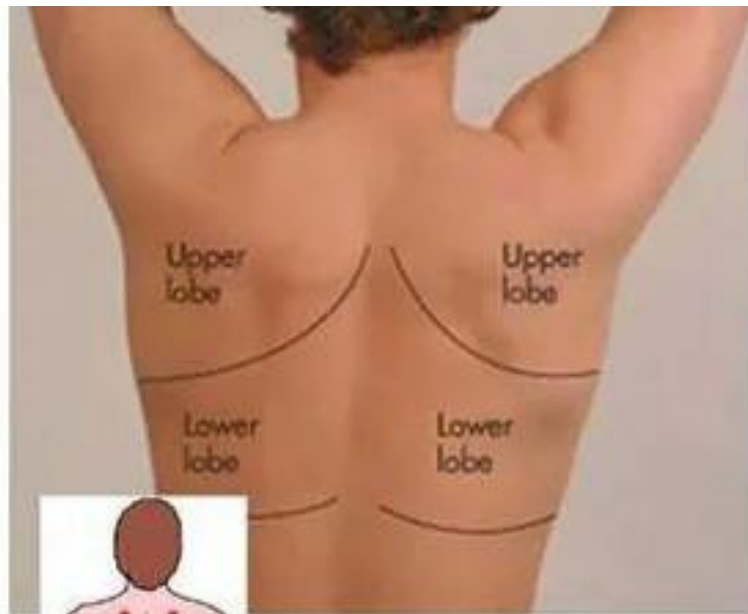
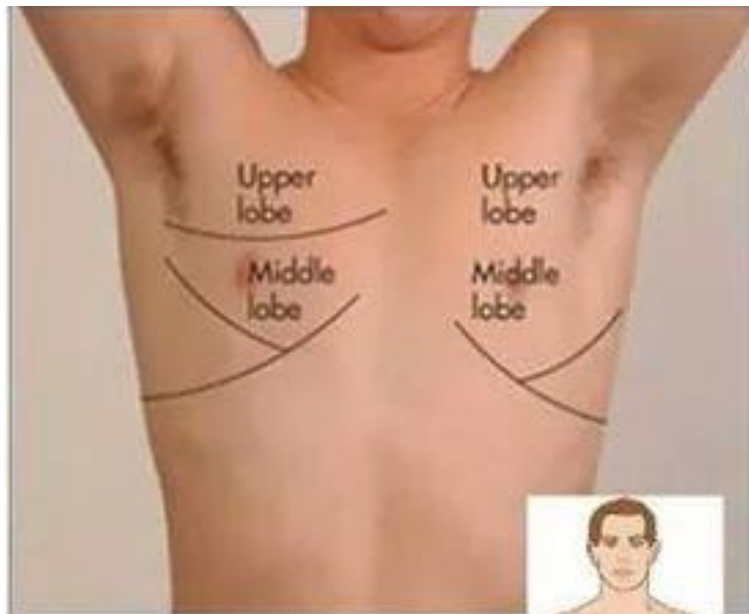
***MIP : Maximal Intensité Projection***

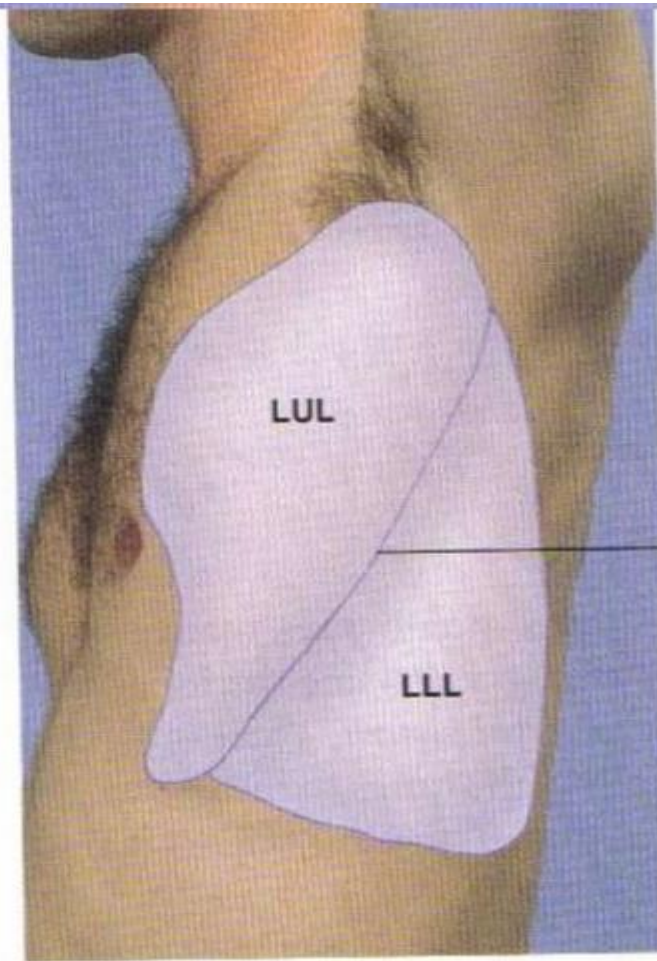
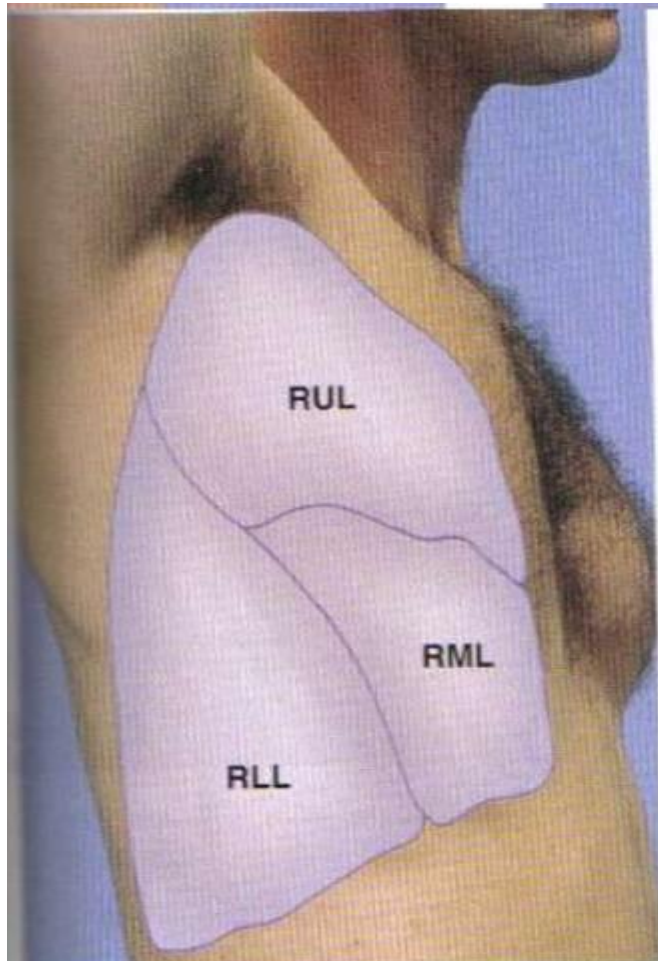


## LES SCISSURES

- La plèvre viscérale s'insinue dans les scissures
- **GRANDES SCISSURES** entre les lobes supérieur et inférieur et sont **obliques**
- **PETITE SCISSURE** entre le lobe supérieur droit et lobe moyen et est proche de l'**horizontale**
- **SCISSURES ACCESSOIRES** azygos, paracardiaque, linguale, verticale externe...





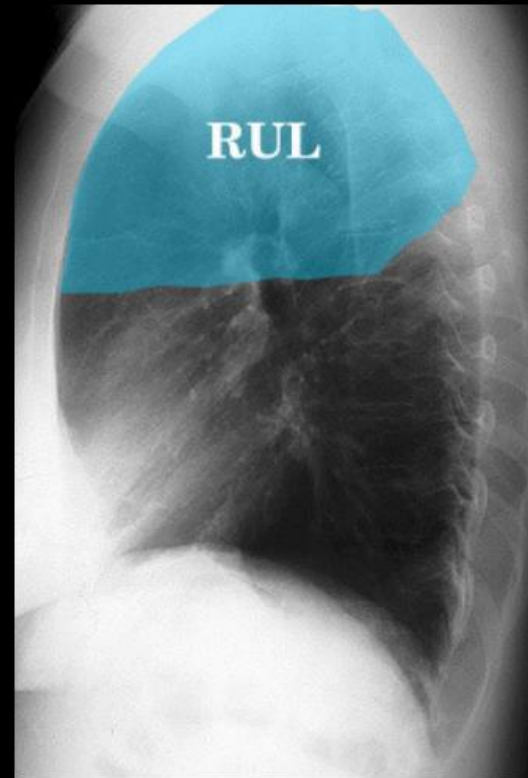
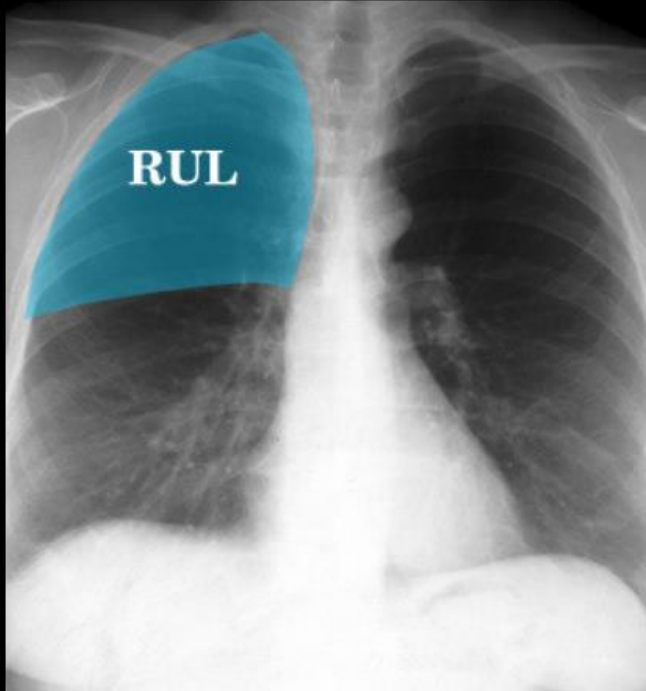


Left oblique fissure

### III/RESULTATS:

#### 1- Projection du lobe supérieur droit:

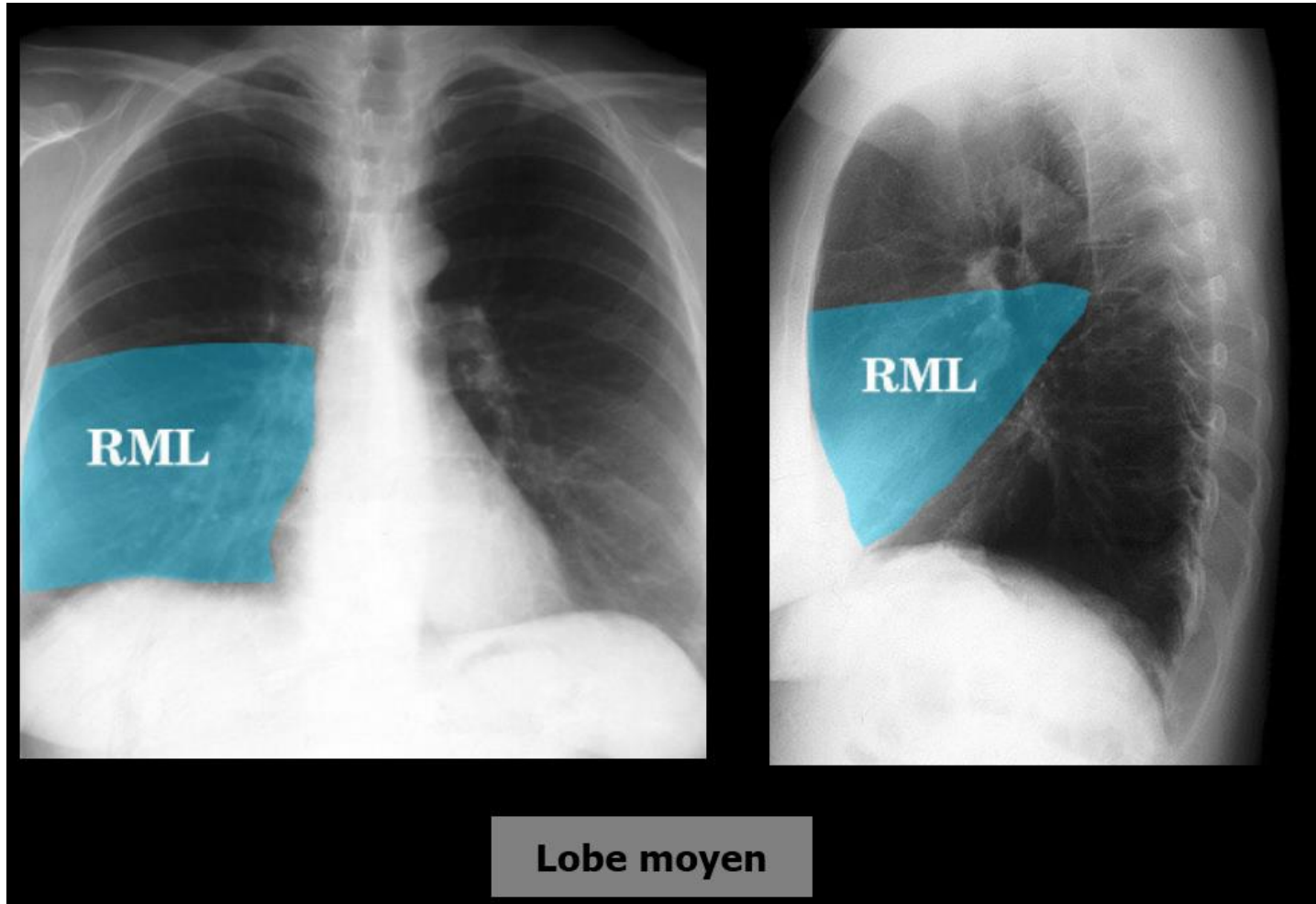
**Radiographie standard**



**Lobe supérieur droit**

### III/RESULTATS:

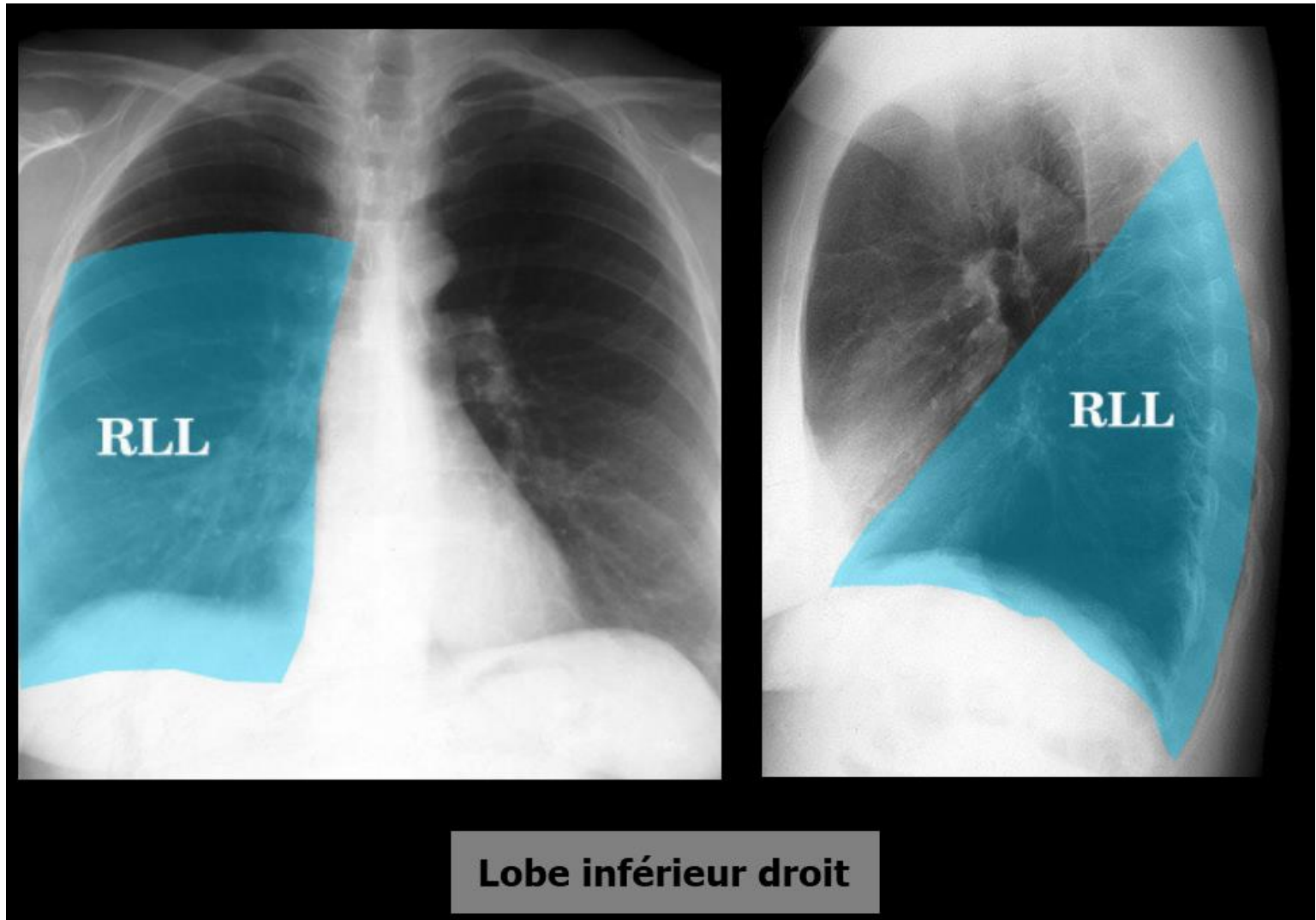
#### 2- Projection du lobe moyen droit:





### III/RESULTATS:

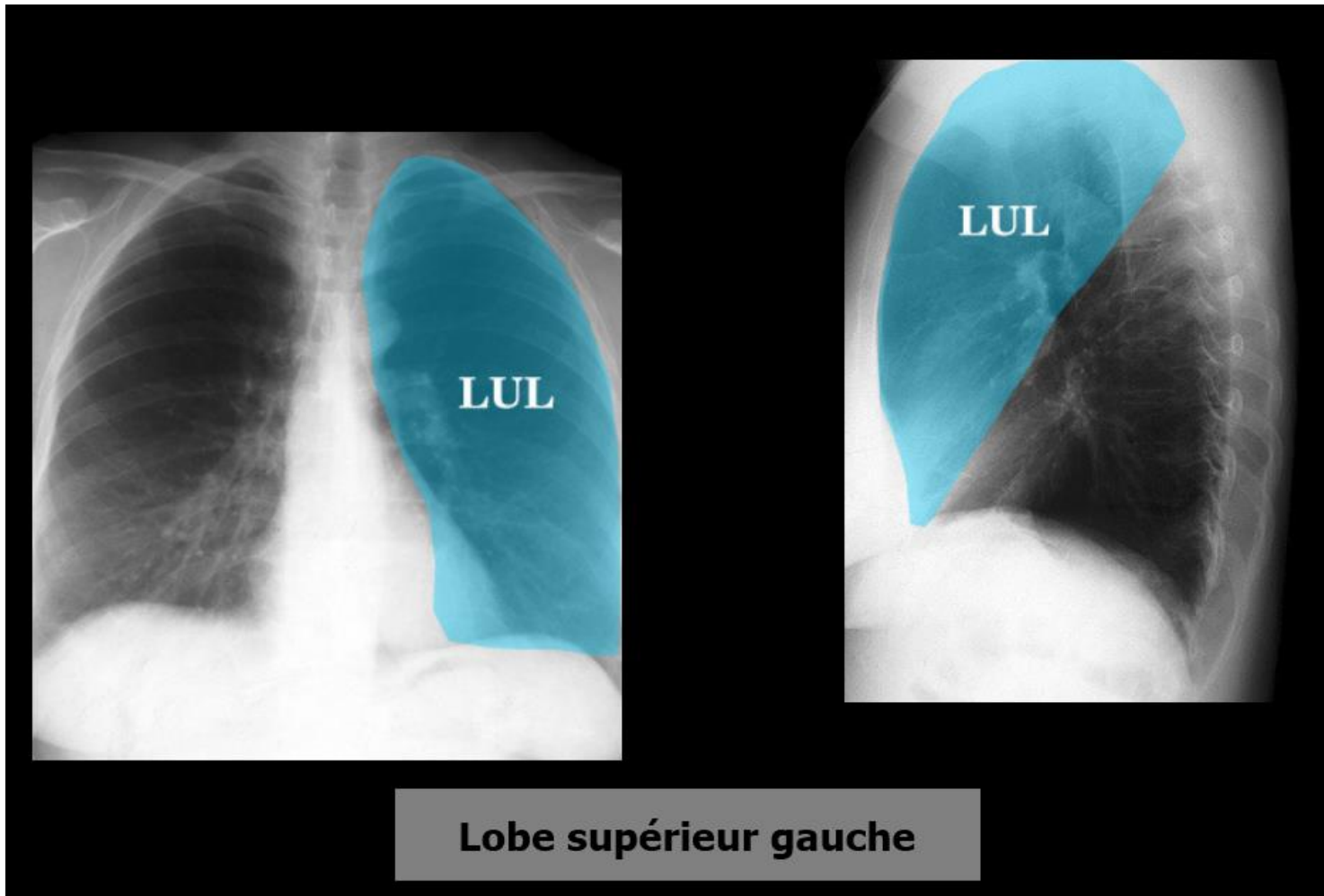
#### Projection du lobe inferieur droit:



Lobe inférieur droit

### III/RESULTATS:

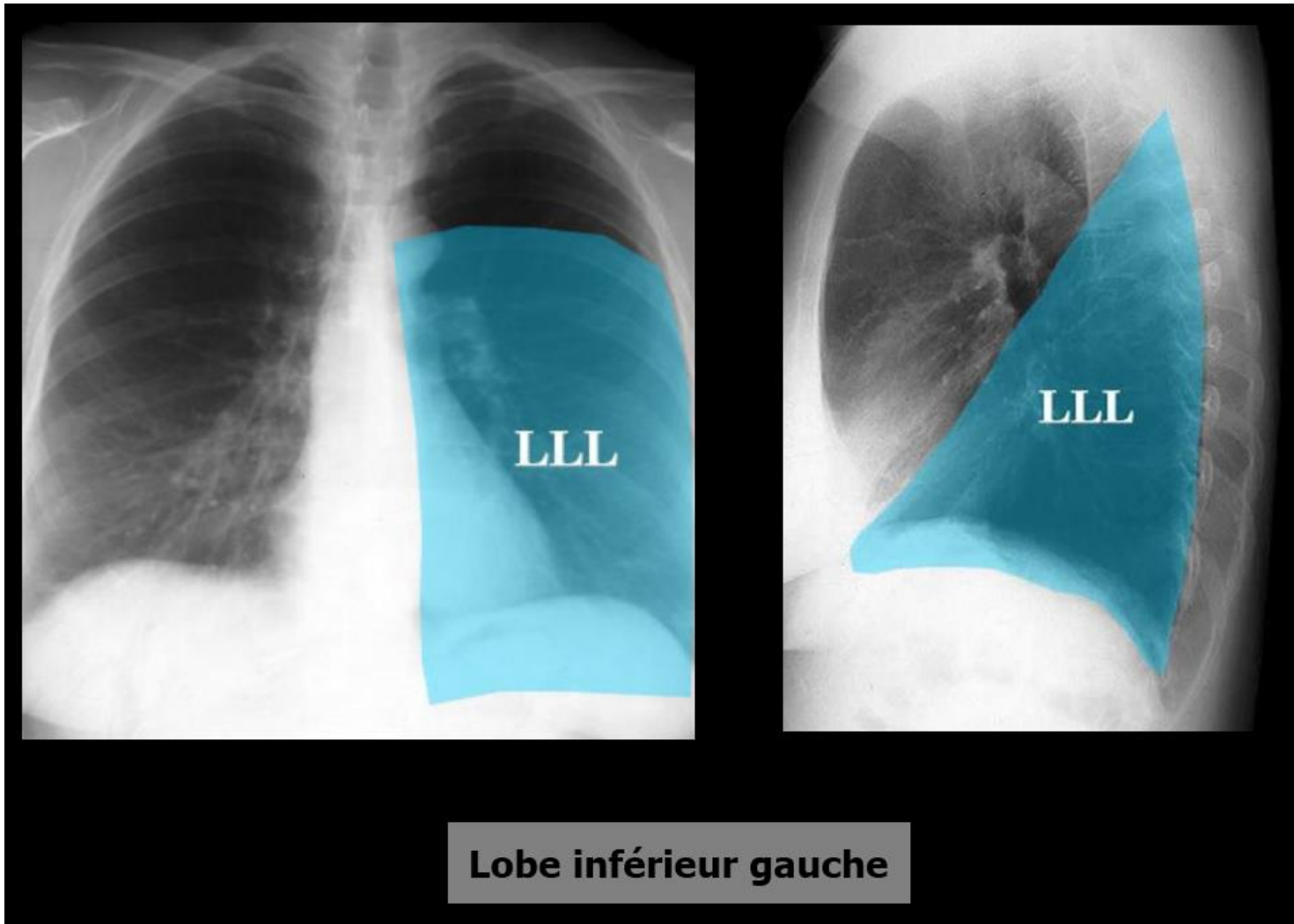
## Projection du lobe supérieur gauche:



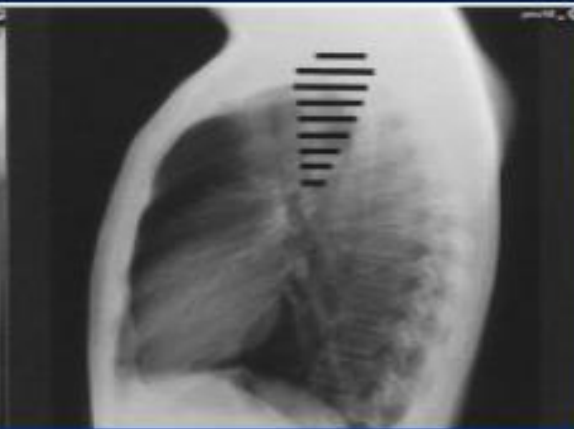


### III/RESULTATS:

## Projection du lobe inférieur gauche:

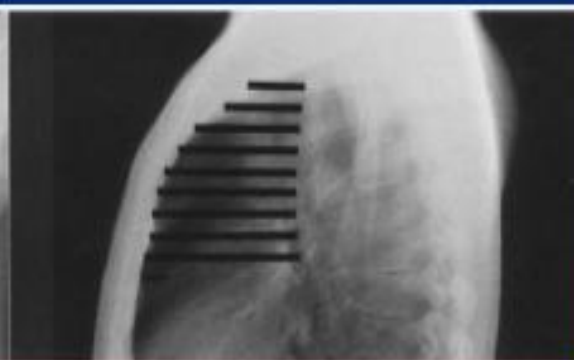


Lobe inférieur gauche

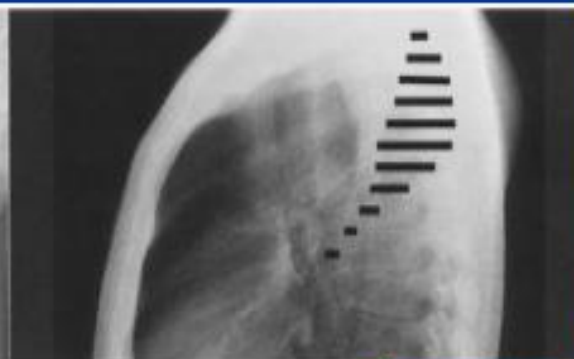


LOBE DROIT

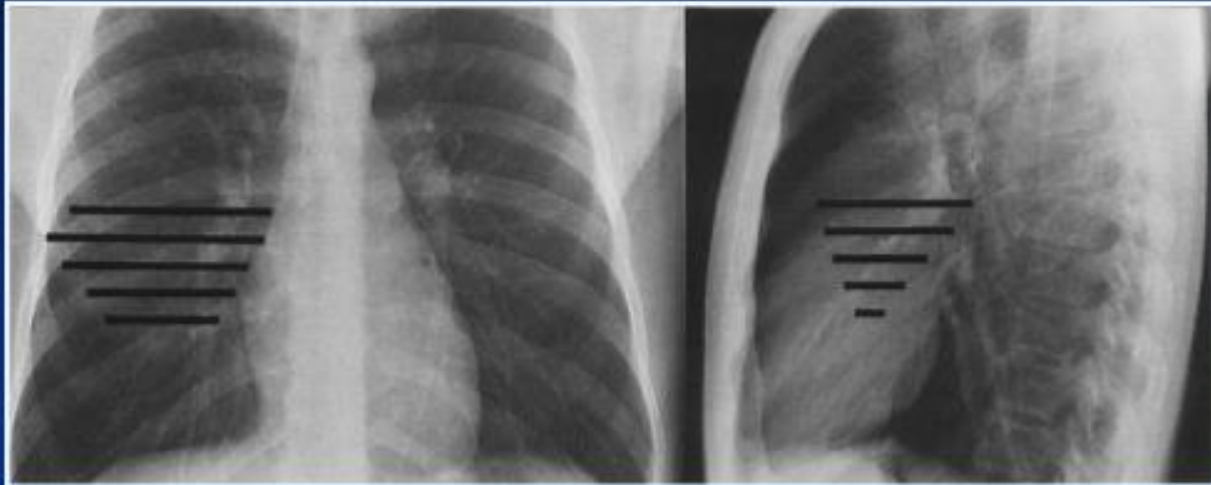
APICAL



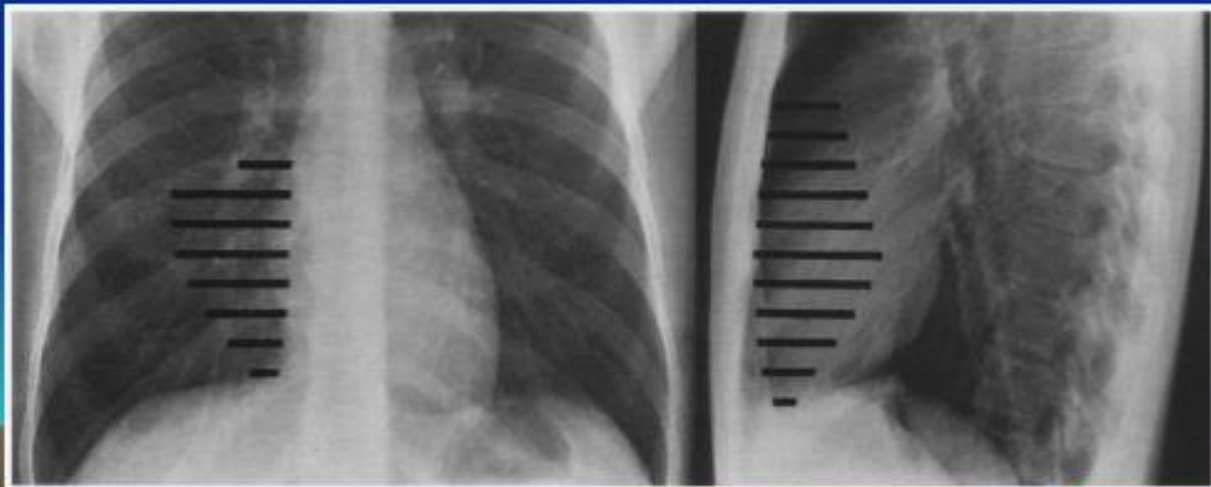
VENTRAL



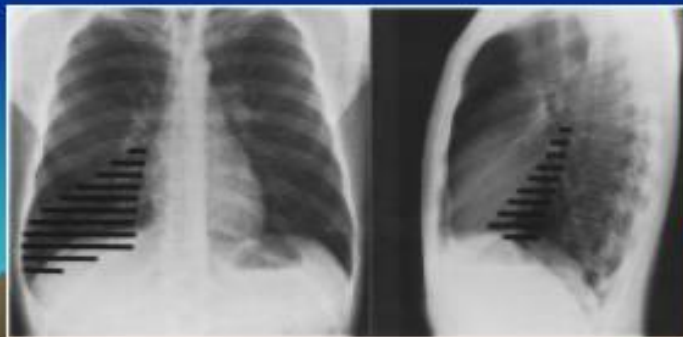
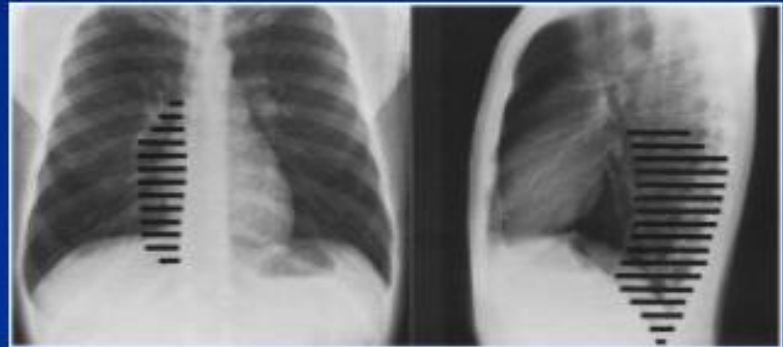
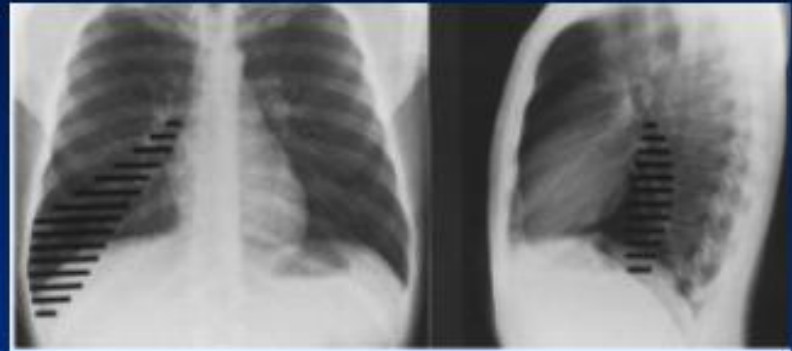
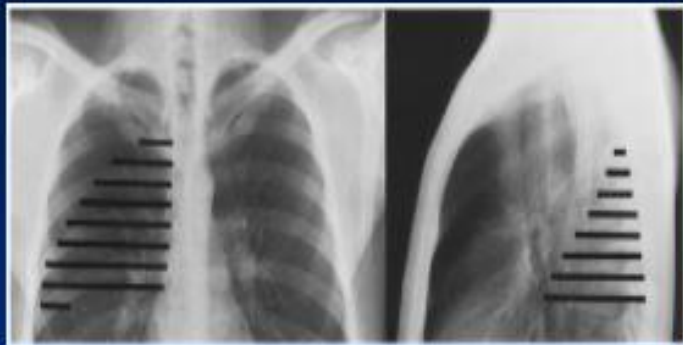
DORSAL



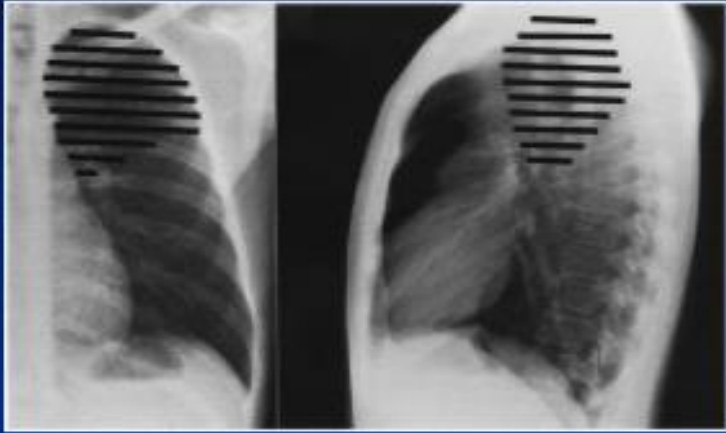
**POSTERO  
EXT 4**



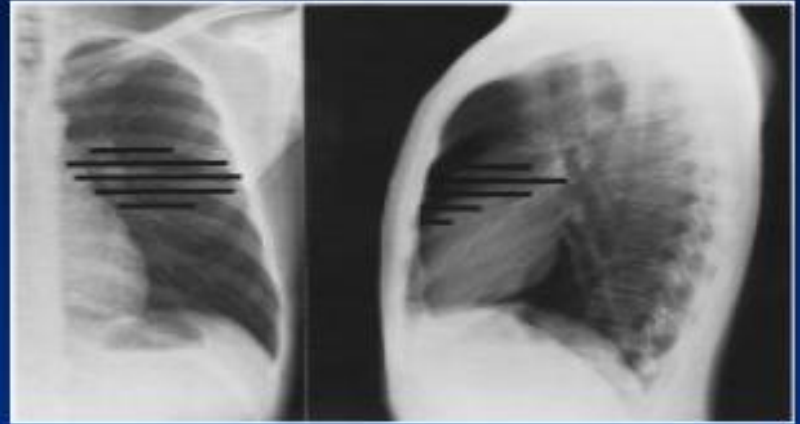
**ANT  
INT 5**



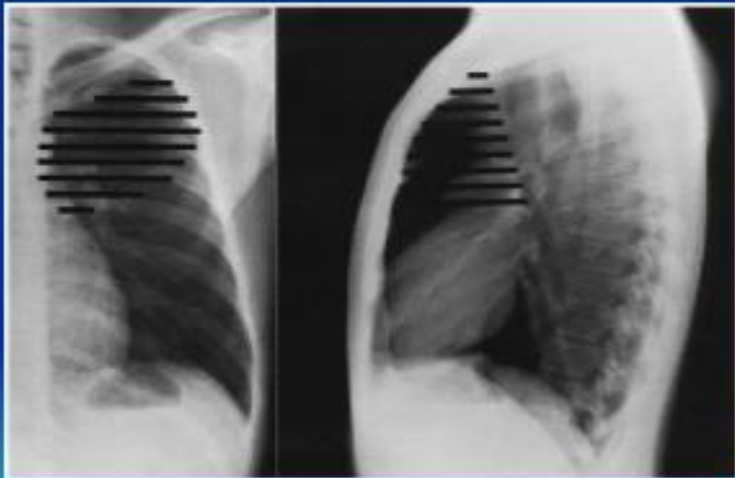
6/NELSON  
7/PARACARD  
8/VENT BASAL  
9/LATERO BASAL  
10/POST BASAL



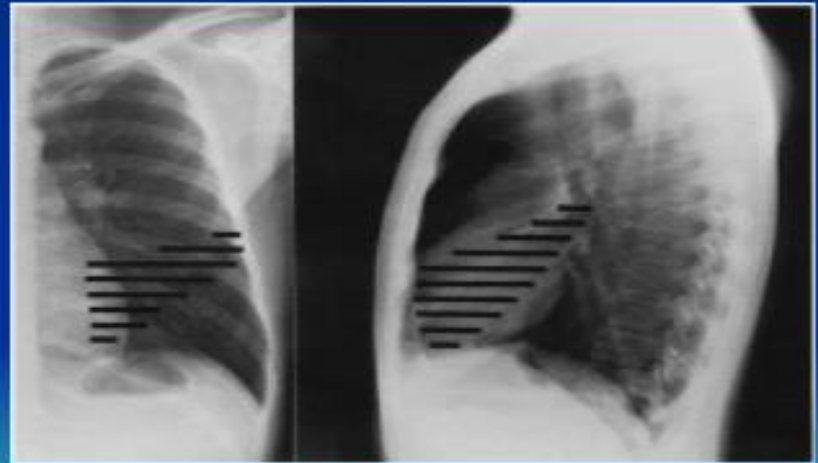
**APICO-DORSAL 1+3**



**SUP 4**



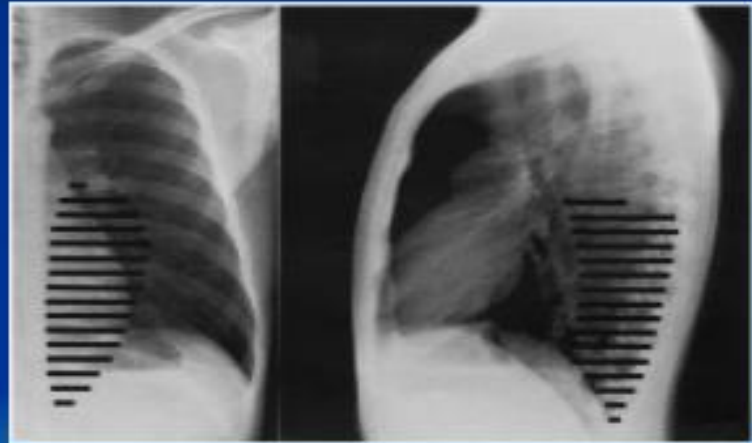
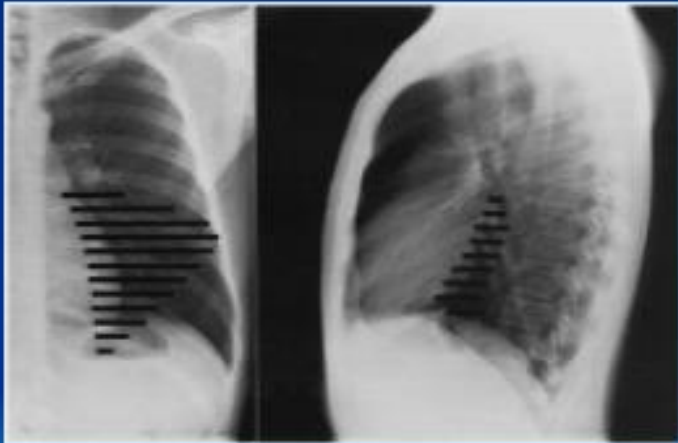
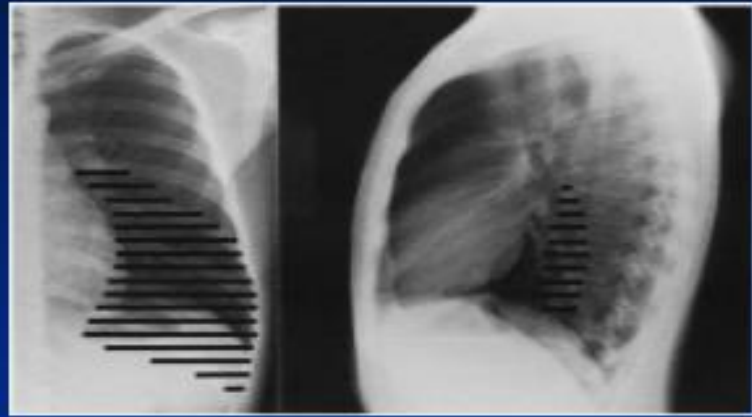
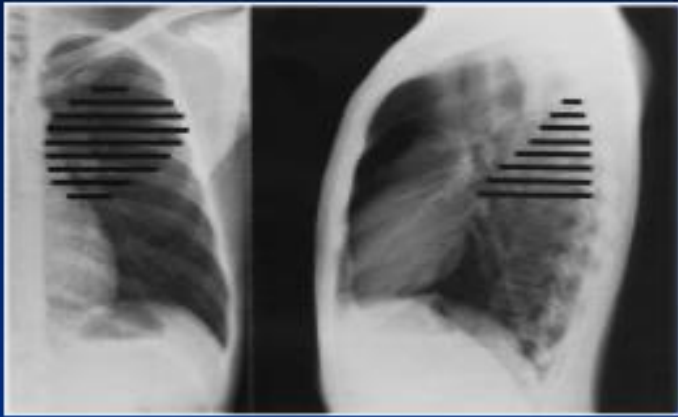
**VENTRAL 2**

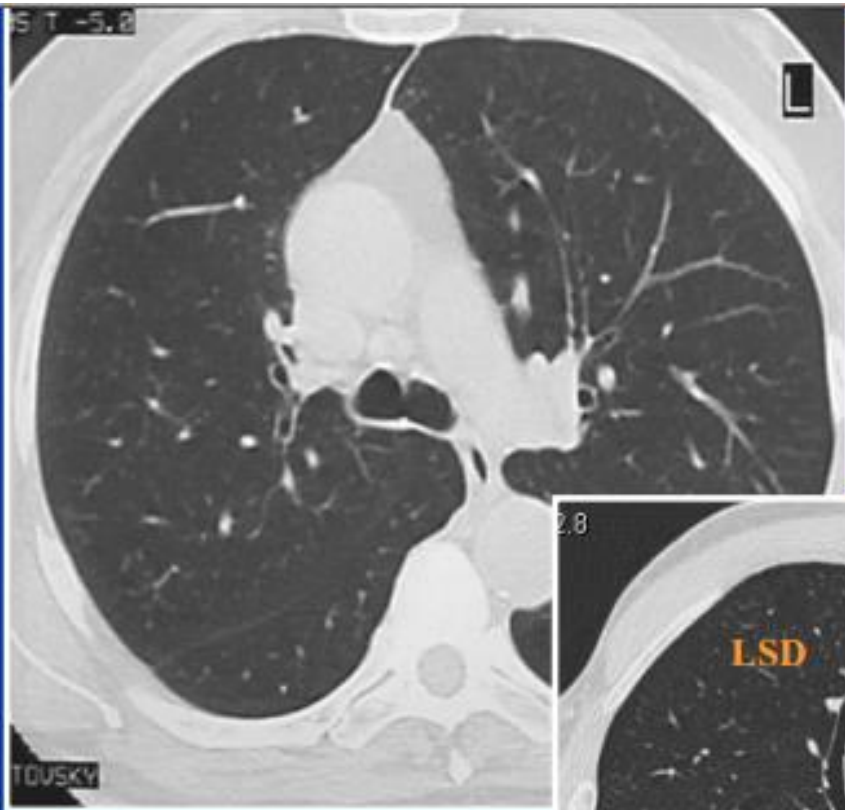


**INF 5**







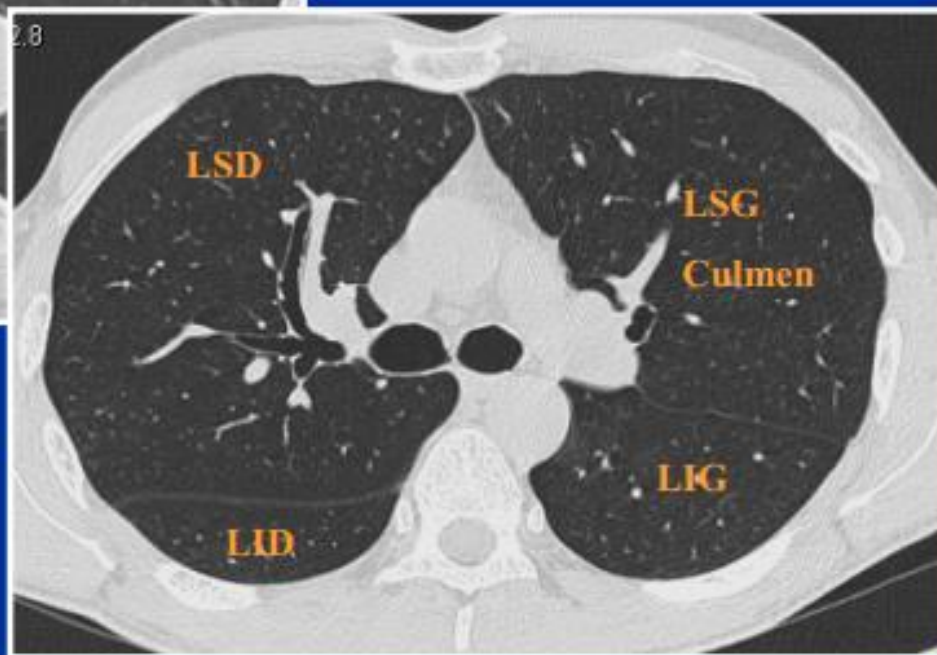


Bronche lobaire supérieure droite et B1,2,3

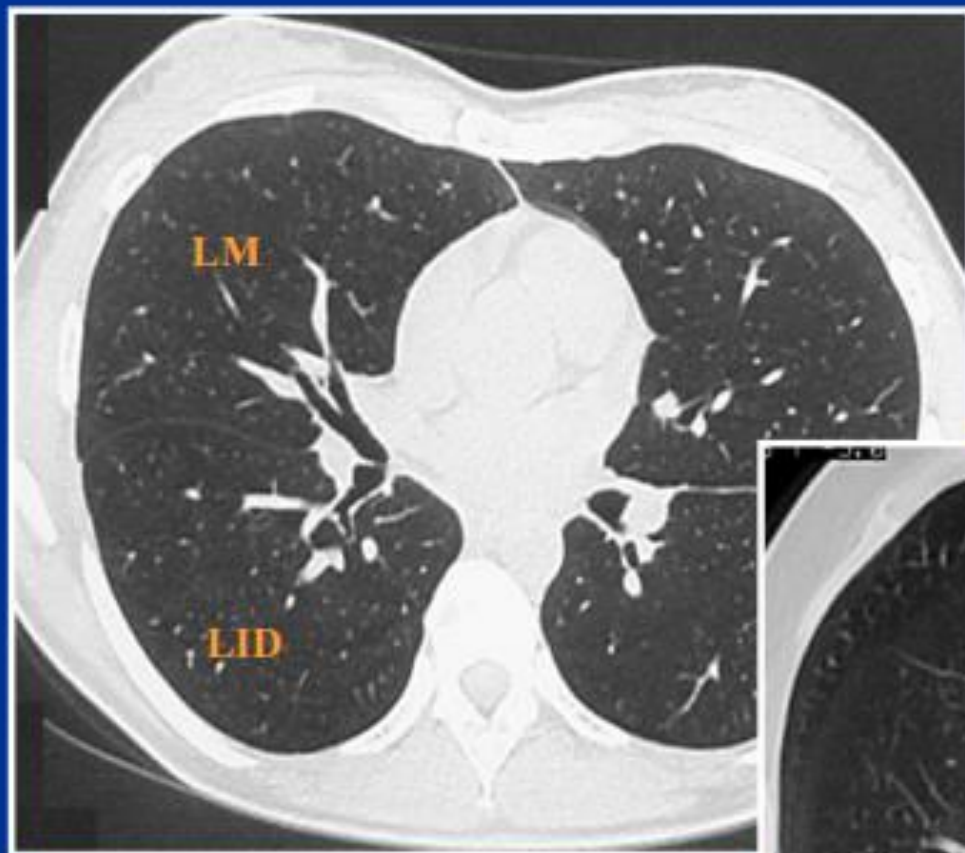
Br. culminale

Carène

Les 2 bronches souches ou principales







**Br. Lobaire  
inférieure gauche**

**Bronche lobaire moyenne  
les segmentaires B4 et B5  
en avant.  
Éperon lobaire moyen**





- 7 Paracardique
- 8 Ventro-basal
- 9 Latéro-basal
- 10 Postéro-basal

# Poumon droit

- 3 lobes :

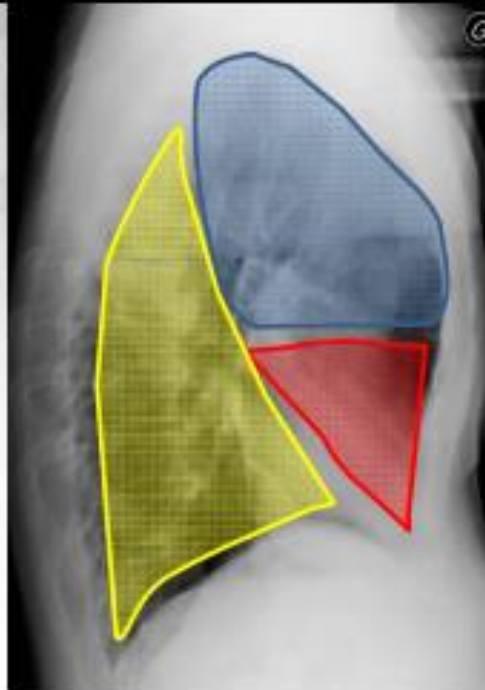
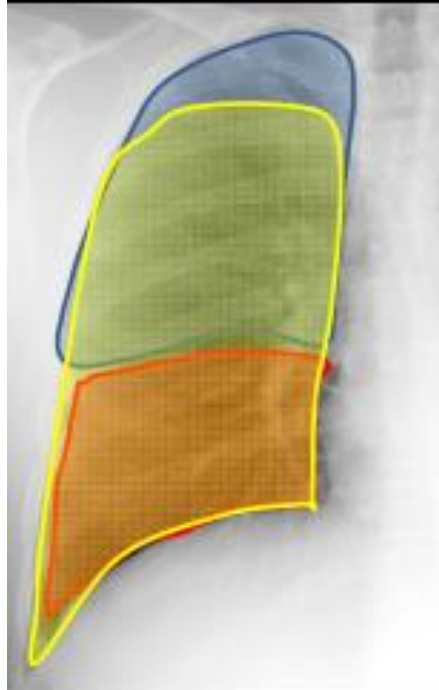
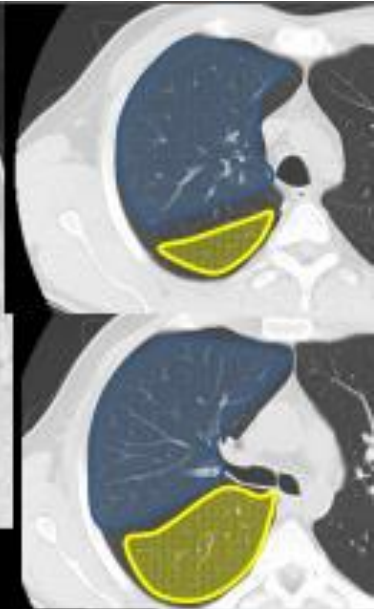
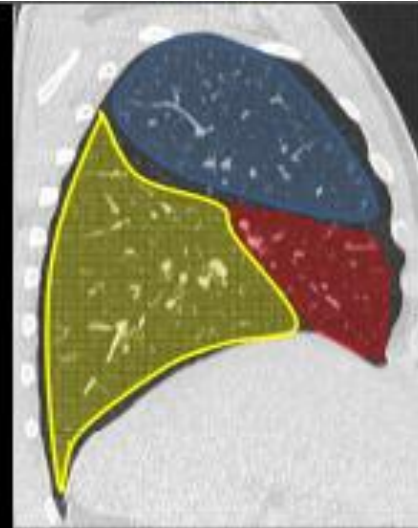
- Supérieur



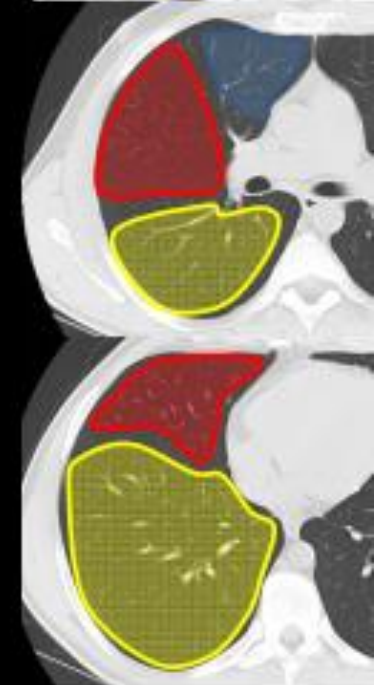
- Moyen



- Inférieur







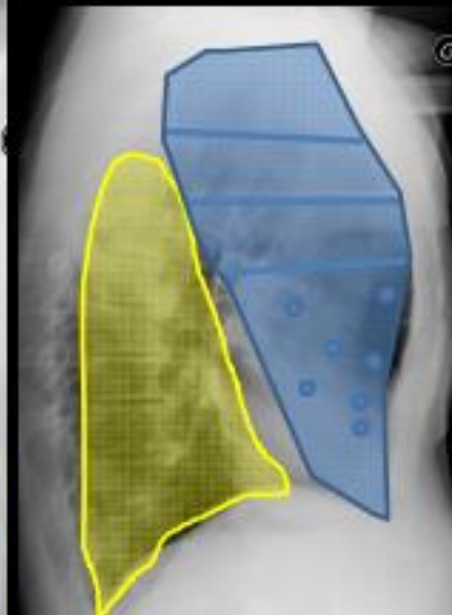
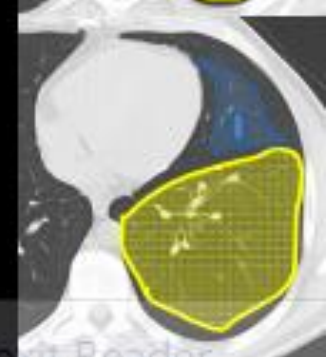
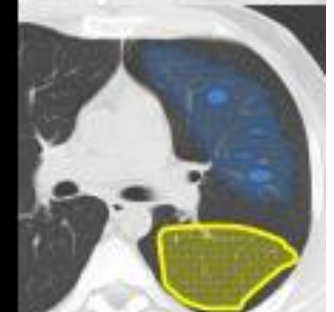
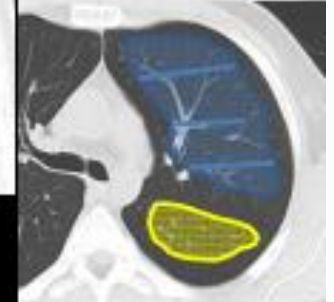
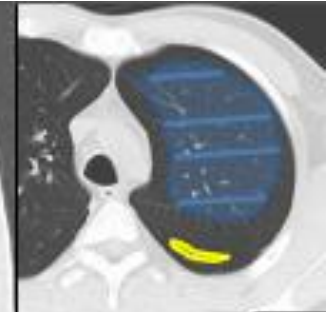
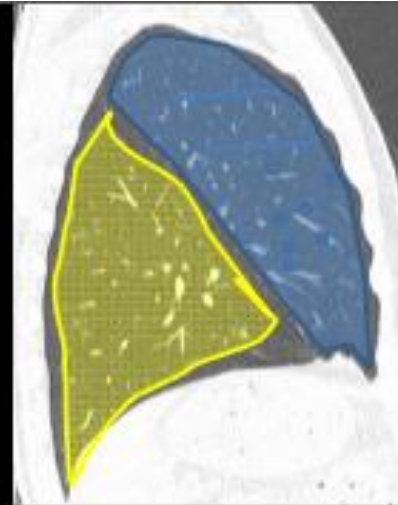
©





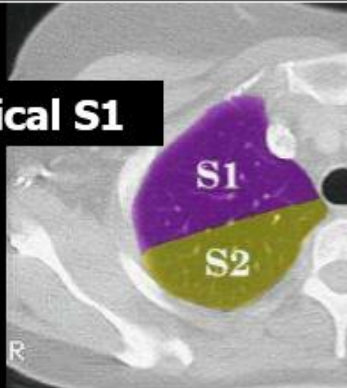
# Poumon gauche

- 2 lobes :
  - Supérieur 
  - Inférieur 
- Lobe supérieur divisé en 2 :
  - Culmen : « équivalent du lobe supérieur droit » 
  - Lingula : « équivalent du lobe moyen » 

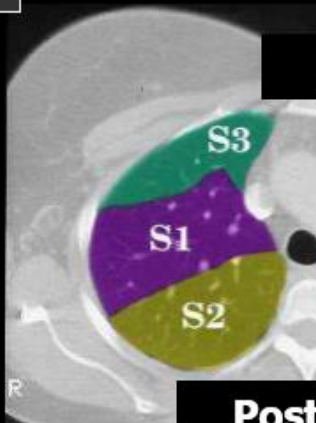


# POUMON DROIT

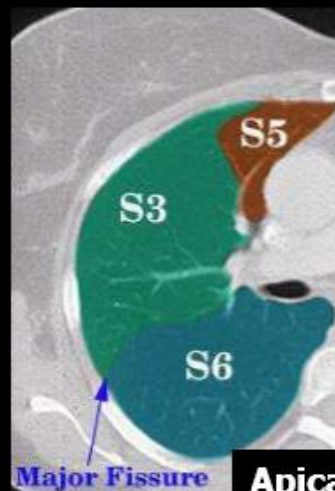
Apical S1



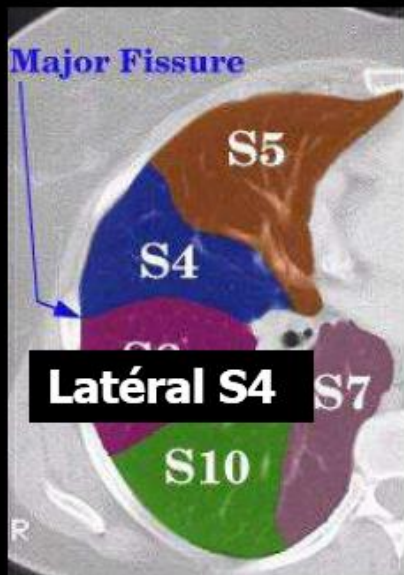
Antérieur S3



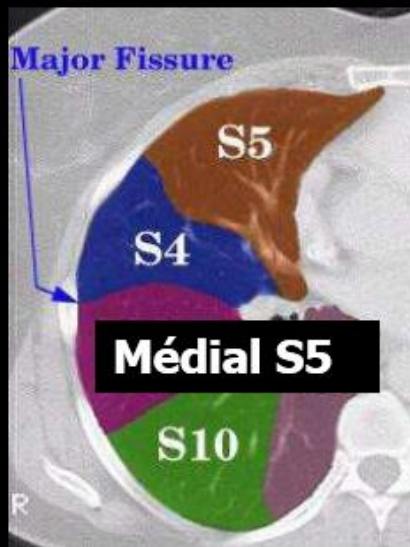
Postérieur S2



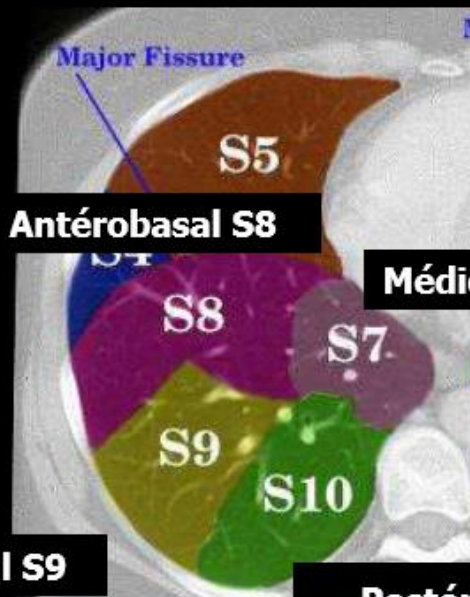
Apical S6



Latéral S4



Médial S5



Antérobasal S8

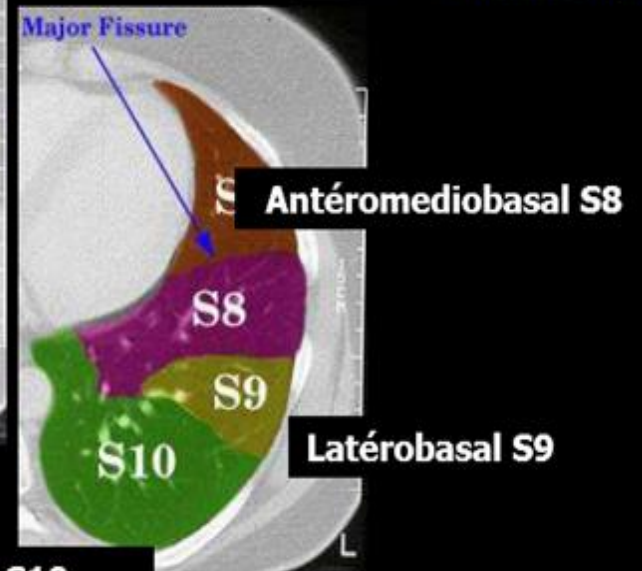
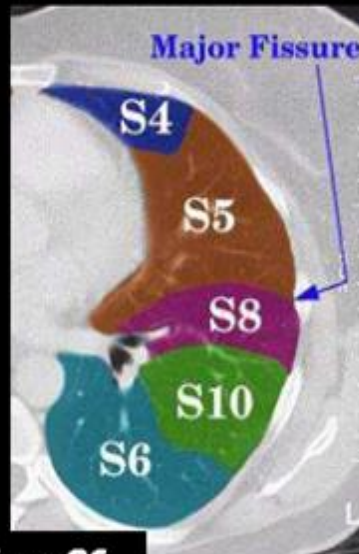
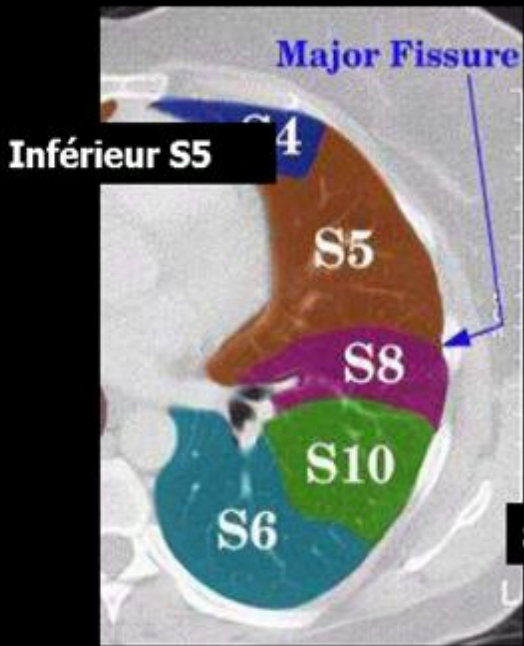
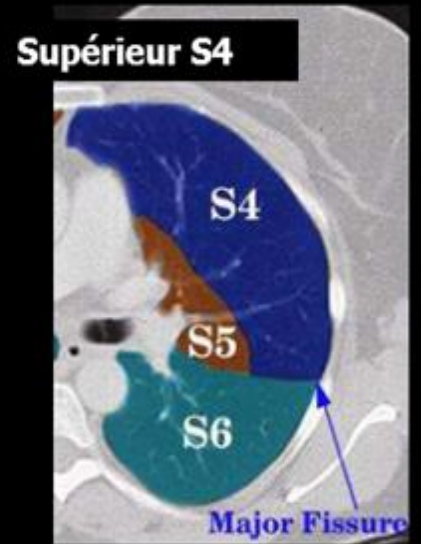
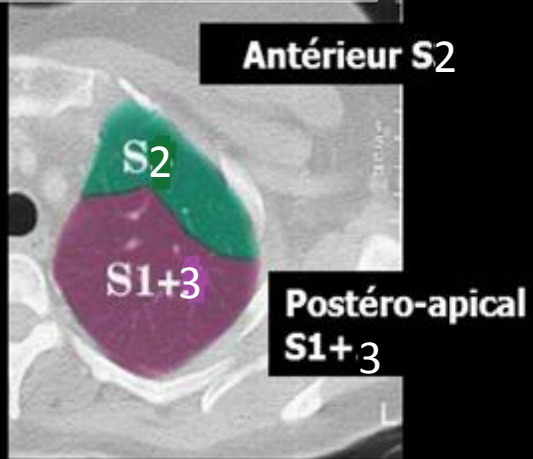
Médiobasal S7

Latérobasal S9

Postérobasal S10



# POUMON GAUCHE



**Postérobasal S10**



## Bronche ectopique



**Merci**