

Le nodule pulmonaire isolé

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Définitions

Un nodule pulmonaire solitaire est défini comme étant une opacité sphérique d'un diamètre ≤ 3 cm et totalement entouré de parenchyme pulmonaire.

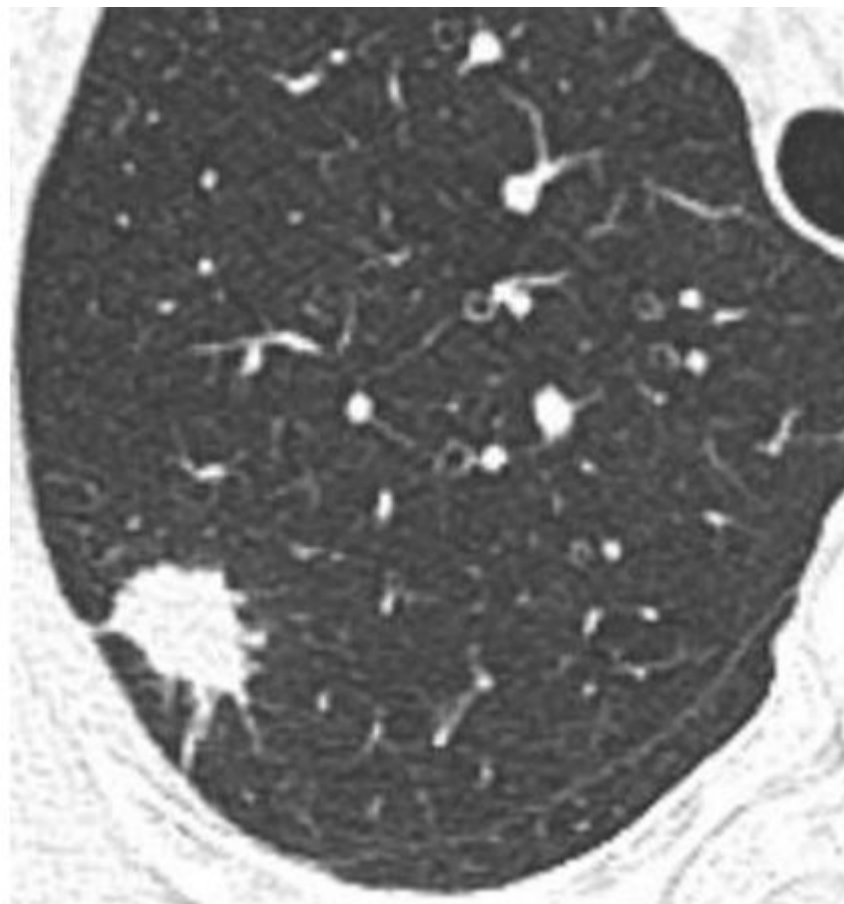
On distingue deux types de nodules:

- nodule solide
- nodule en verre dépoli

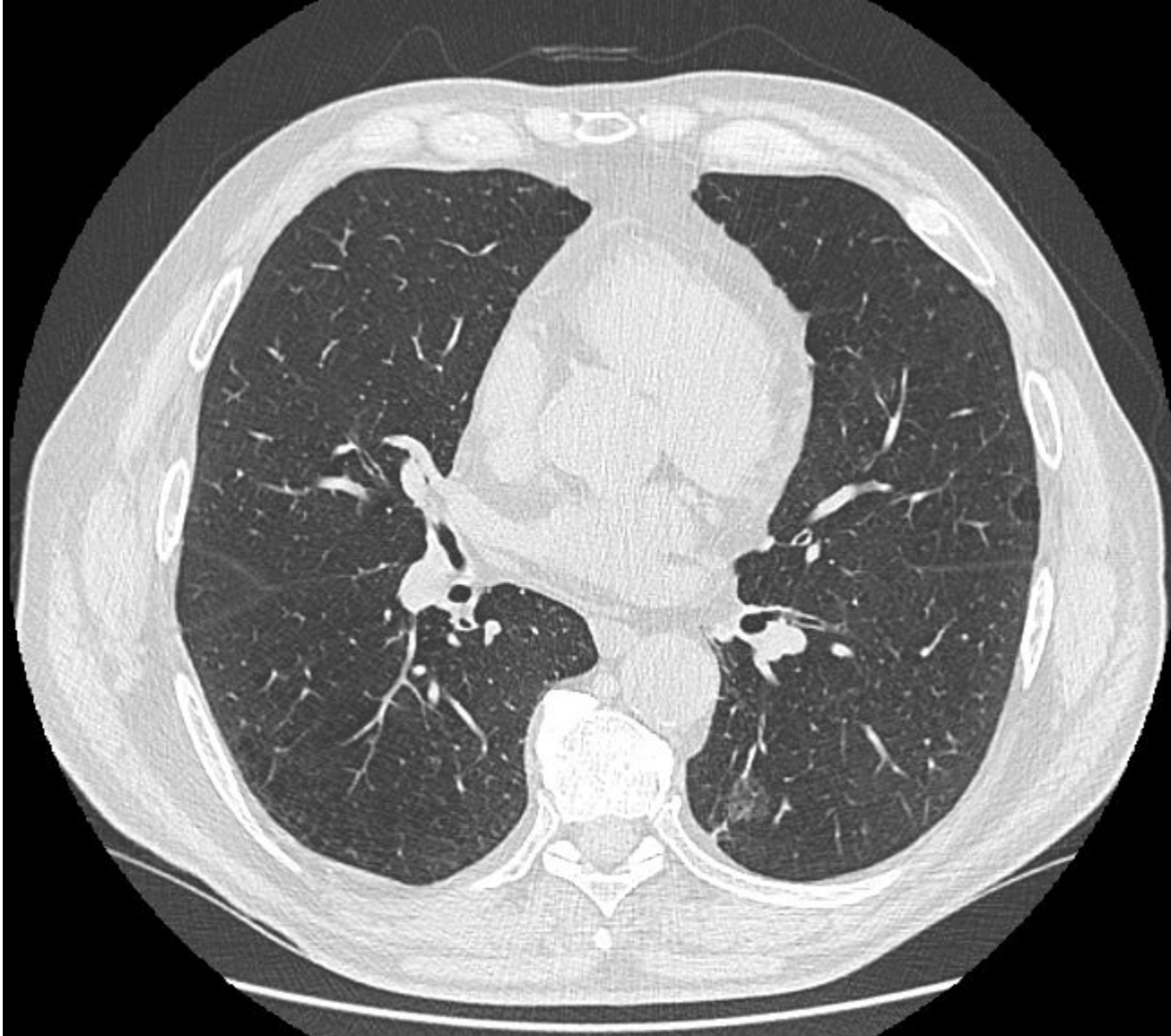
Nodule solide



Nodule solide

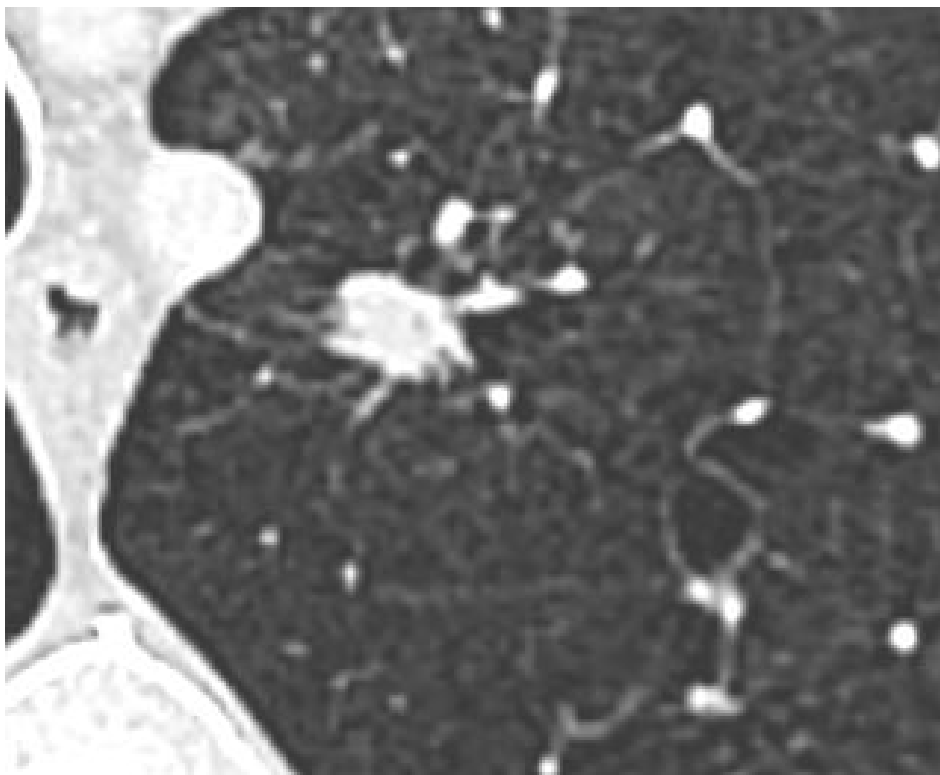


Nodule en verre dépoli

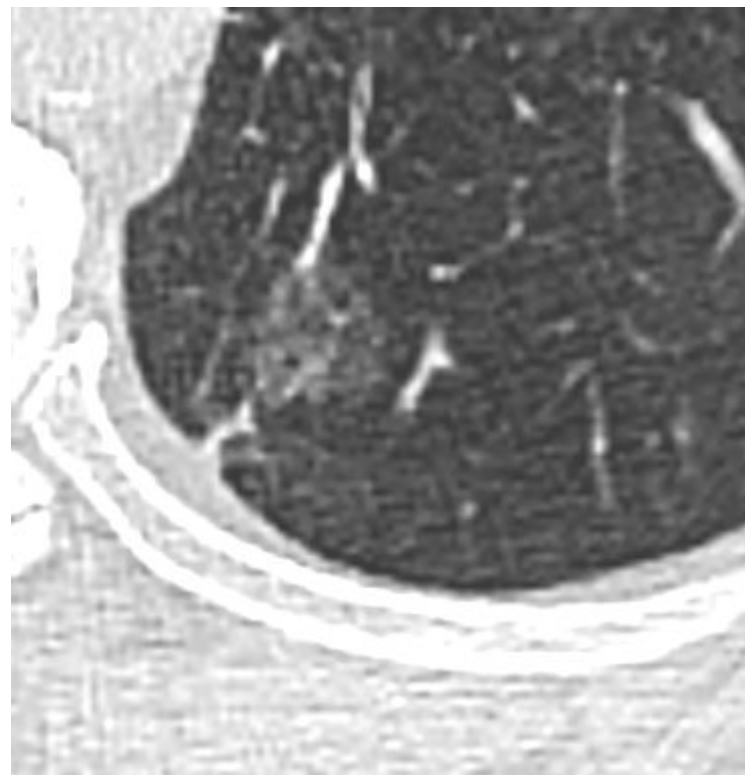


Nodule en verre dépoli





Nodule solide



Verre dépoli

Diagnostic tomodensitométrie

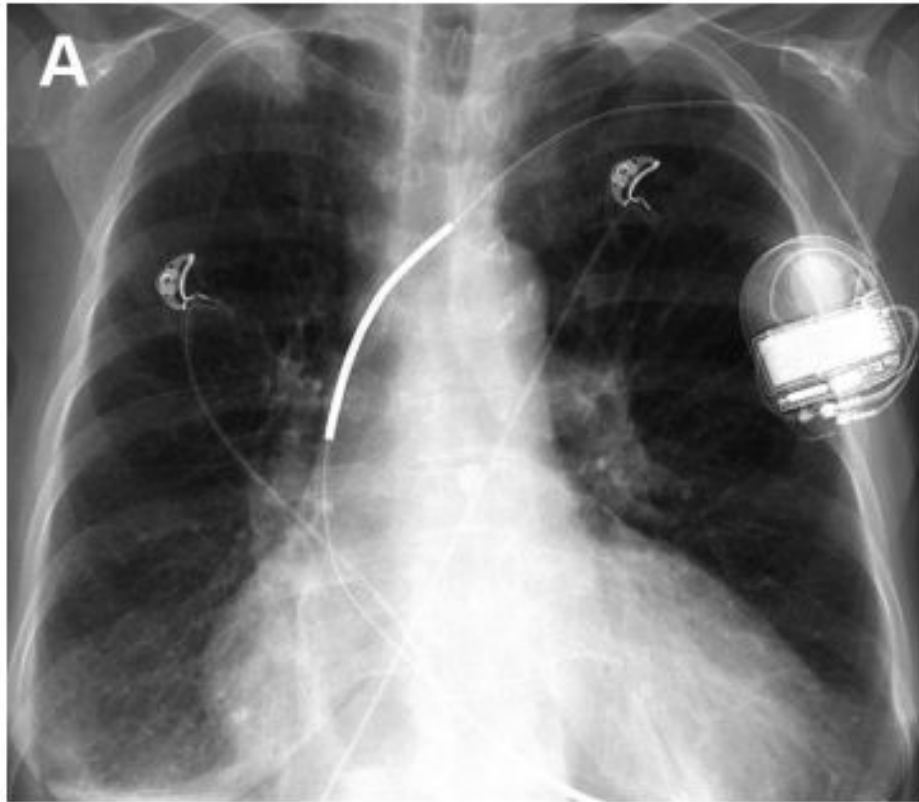
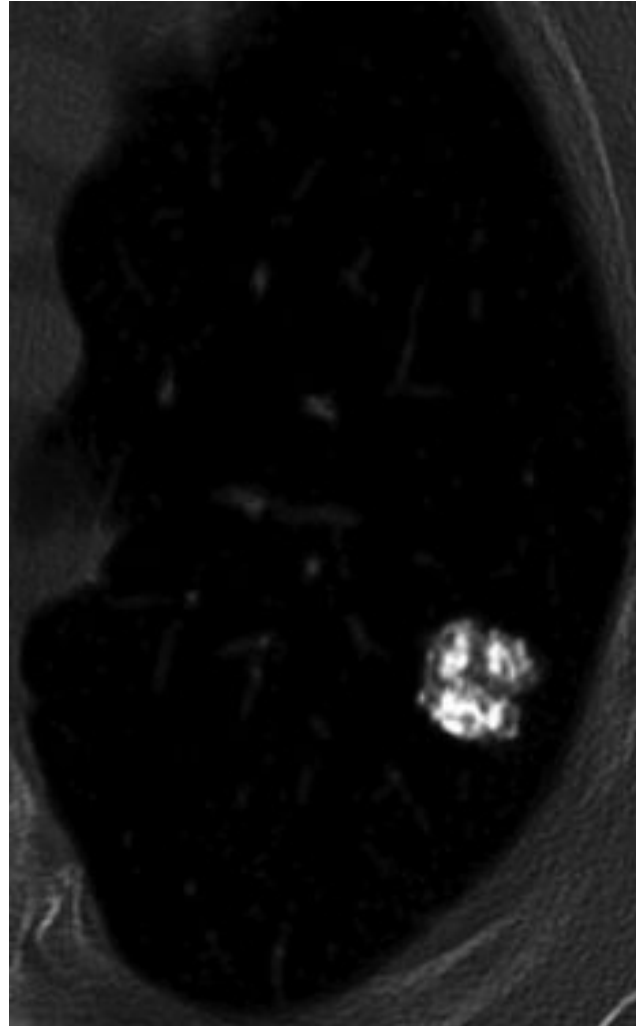


Table 3
Differential diagnosis of the solitary pulmonary nodule

	Benign		Malignant
Infectious	Pneumonia; abscess Granuloma	Primary lung cancer, solid	Adenocarcinoma Squamous cell carcinoma
Noninfectious	Rheumatoid nodule Wegener granuloma Sarcoidosis Hemorrhage; lung infarct ^a Organizing pneumonia ^a	Primary lung cancer, subsolid	Small cell carcinoma Carcinoid Lymphoma Adenocarcinoma Minimally invasive adenocarcinoma
Neoplastic	Lipoid pneumonia Hamartoma Sclerosing hemangioma	Solitary lung metastasis	AIS AAH
Vascular	Pulmonary arteriovenous malformation		
Congenital	Bronchial atresia Bronchogenic cyst		
Miscellaneous	Intrapulmonary lymph node Mucus-impacted airway Focal scar; fibrosis ^a Round atelectasis		

Calcifications en pop-corn: hamartome



IASLC/ATS/ERS Adenocarcinoma Classification

- Preinvasive lesions
 - Atypical Adenomatous Hyperplasia (AAH)
 - Adenocarcinoma *in situ* (AIS, ≤ 3 cm)
 - Non-mucinous
 - Mucinous
- **Minimally Invasive Adenocarcinoma (MIA, ≤ 3 cm)**
 - Lepidic predominant tumor with ≤ 5 mm invasion
- **Invasive adenocarcinoma**
 - Lepidic pattern predominant
 - Acinar pattern predominant
 - Papillary pattern predominant
 - Micropapillary pattern predominant
 - Solid pattern predominant

Pre-Invasive Lesion: Adenocarcinoma *in Situ*

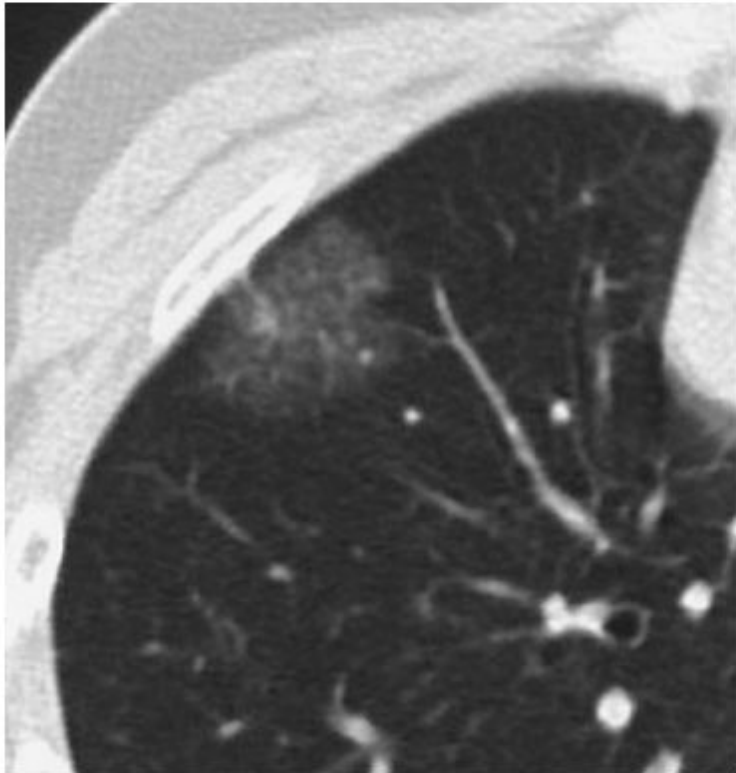


Adenocarcinoma *in situ* (AIS):

- Small (≤ 3 cm)
- Usually solitary
- Pure lepidic growth
- Usually nonmucinous
- Rarely mucinous

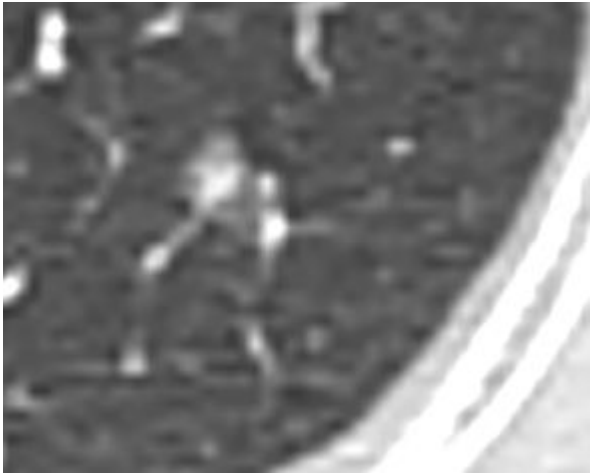
This phenotype (small, ground-glass or nonsolid nodule) is a surrogate marker for AIS, with excellent prognosis

Minimally Invasive Adenocarcinoma (MIA)

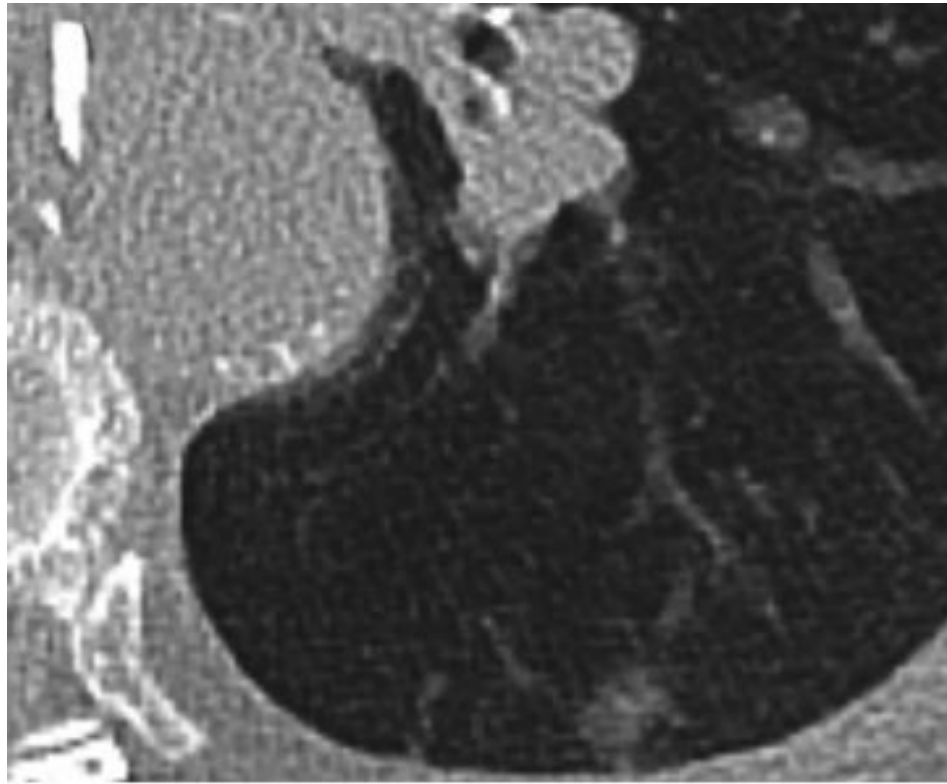


- A phenotype of mainly ground-glass, plus a small (≤ 5 mm) central solid component is a surrogate marker for MIA
 - Also described as ≤ 2 cm and ≤ 0.25 cm solid portion
- Small (≤ 3 cm), usually solitary adenocarcinoma
 - Predominantly lepidic growth
 - ≤ 5 mm invasion
 - Usually nonmucinous; rarely mucinous

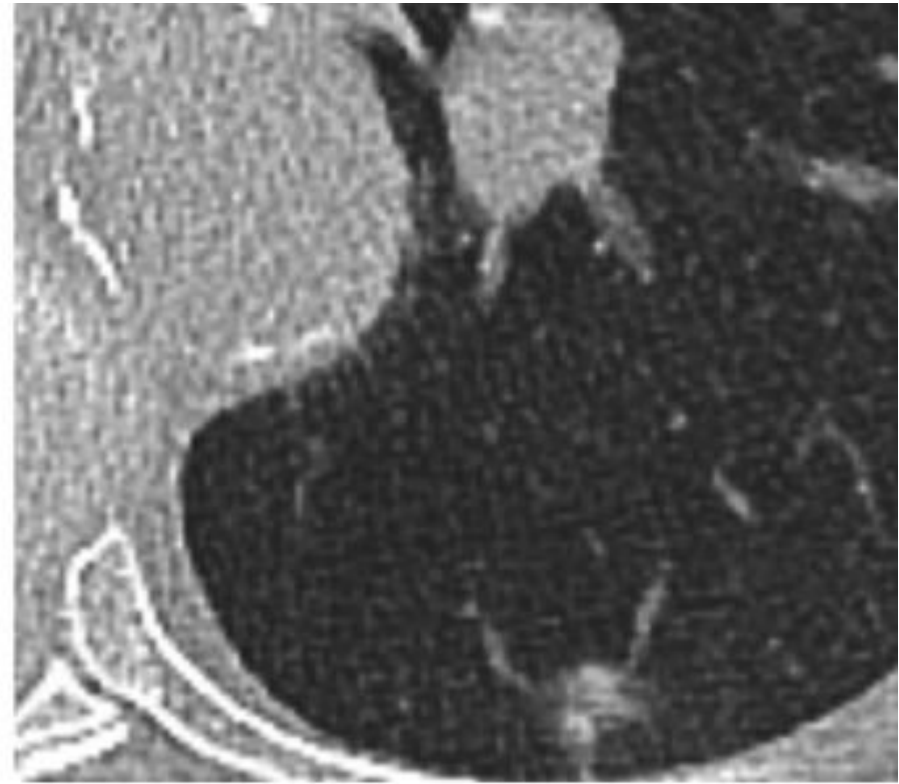
Composante solide au sein d'une plage en verre dépoli



Composante solide au sein d'une plage en verre dépoli



M1



M9

Invasive Adenocarcinoma

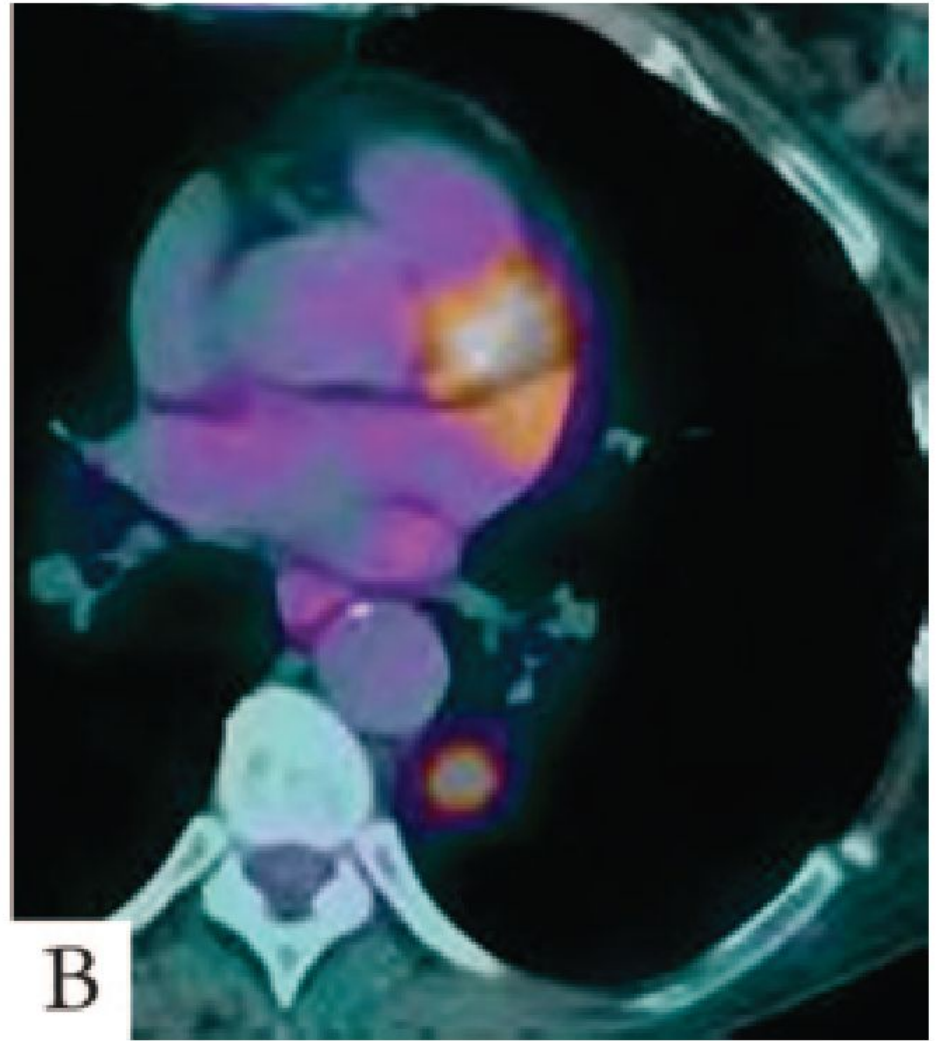
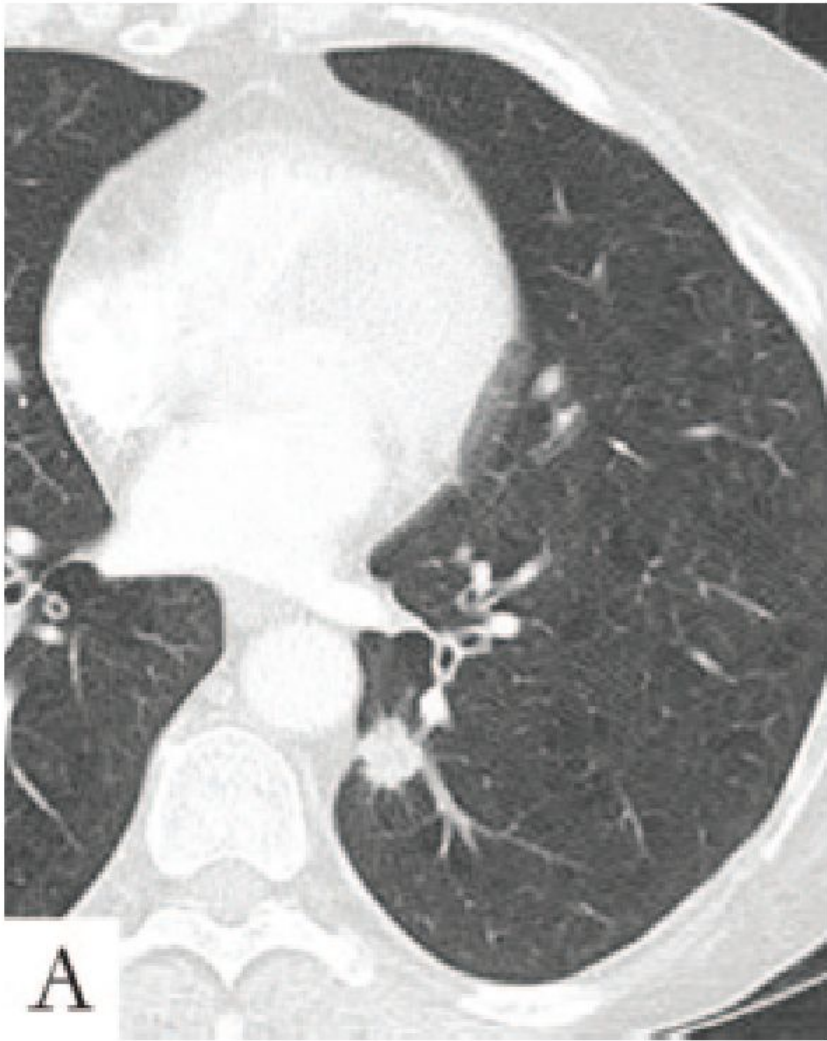
- **Lepidic predominant**
 - Formerly non-mucinous BAC pattern, with ≥ 5 mm invasion
- **Acinar-predominant**
- **Papillary-predominant**
- **Micropapillary-predominant**
- **Solid-predominant with mucin production**
- **Variants of invasive adenocarcinoma**
 - Invasive mucinous adenocarcinoma (formerly mucinous BAC)
 - Colloid
 - Fetal (low and high-grade)
 - Enteric



pronostic

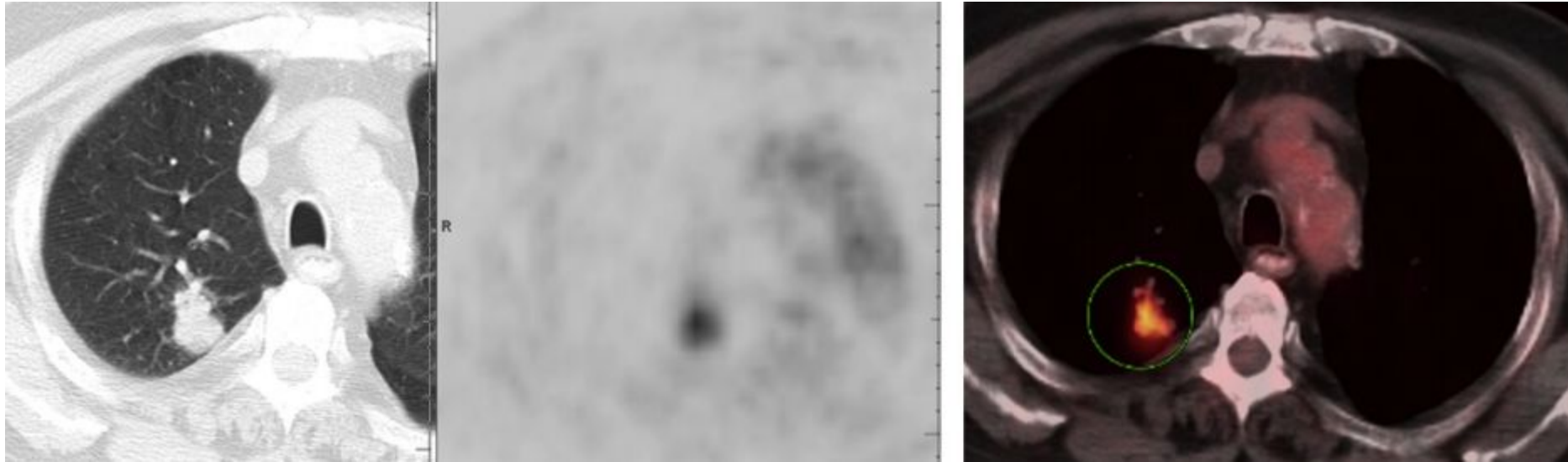


Adenocarcinoma is invasive if exists at least one focus measuring more than 5 mm in greatest dimension

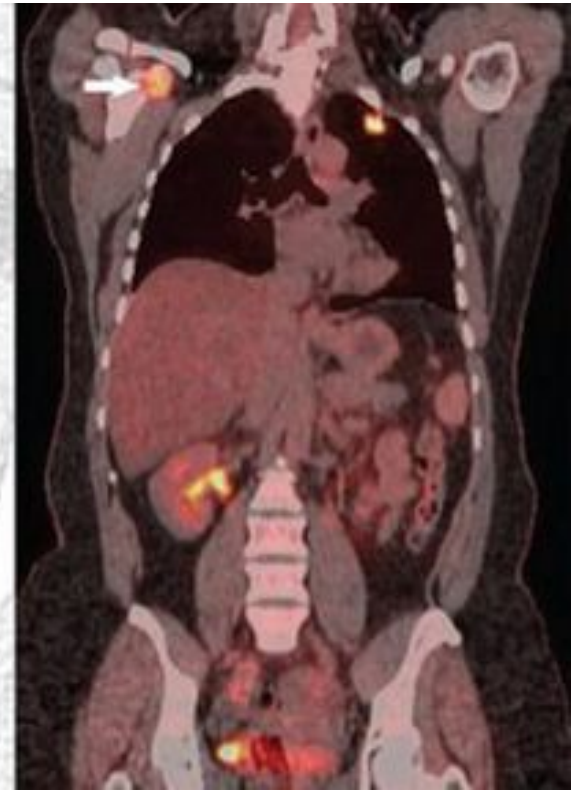


Invasive 2-cm, spiculated, hypermetabolic nodule:
invasive adenocarcinoma

Apport du TEP-scanner



Apport du TEP-scanner



Solid nodule on low-dose CT scan

Benignity criteria

Calcified nodule †

Criteria of probable benignity ‡

None

<5mm

≥5mm

Incidental§

Prevalent

≥5mm and <10mm

≥10mm (~500mm³)

Low-dose control CT scan in 1 year

Negative screening

Indeterminate

Positive screening

Continuation of screening program

See figure 2

Refer to specialist for management

