



RÉVISION DE LA CLASSIFICATION TNM DU CANCER DU POUMON TNM-8

Aloyse FOURQUET – Interne en Médecine

IMAGERIE MÉTABOLIQUE ET FONCTIONNELLE
CENTRE CARDIOLOGIQUE DU NORD
07.06.2018

LA NOUVELLE CLASSIFICATION

- Remplace le TNM – 7 de 2009
- Etude réalisée par l'IASLC (International Association for the Study of Lung Cancer) sur 77.156 patients
- Publiée en janvier 2017 dans CHEST
- Classification d'intérêt pronostique

DÉFINI PAR LA TAILLE DE LA LÉSION PRIMITIVE OU PAR L'INVASION LOCALE

▶ STADE T

MESURE DE LA TUMEUR :

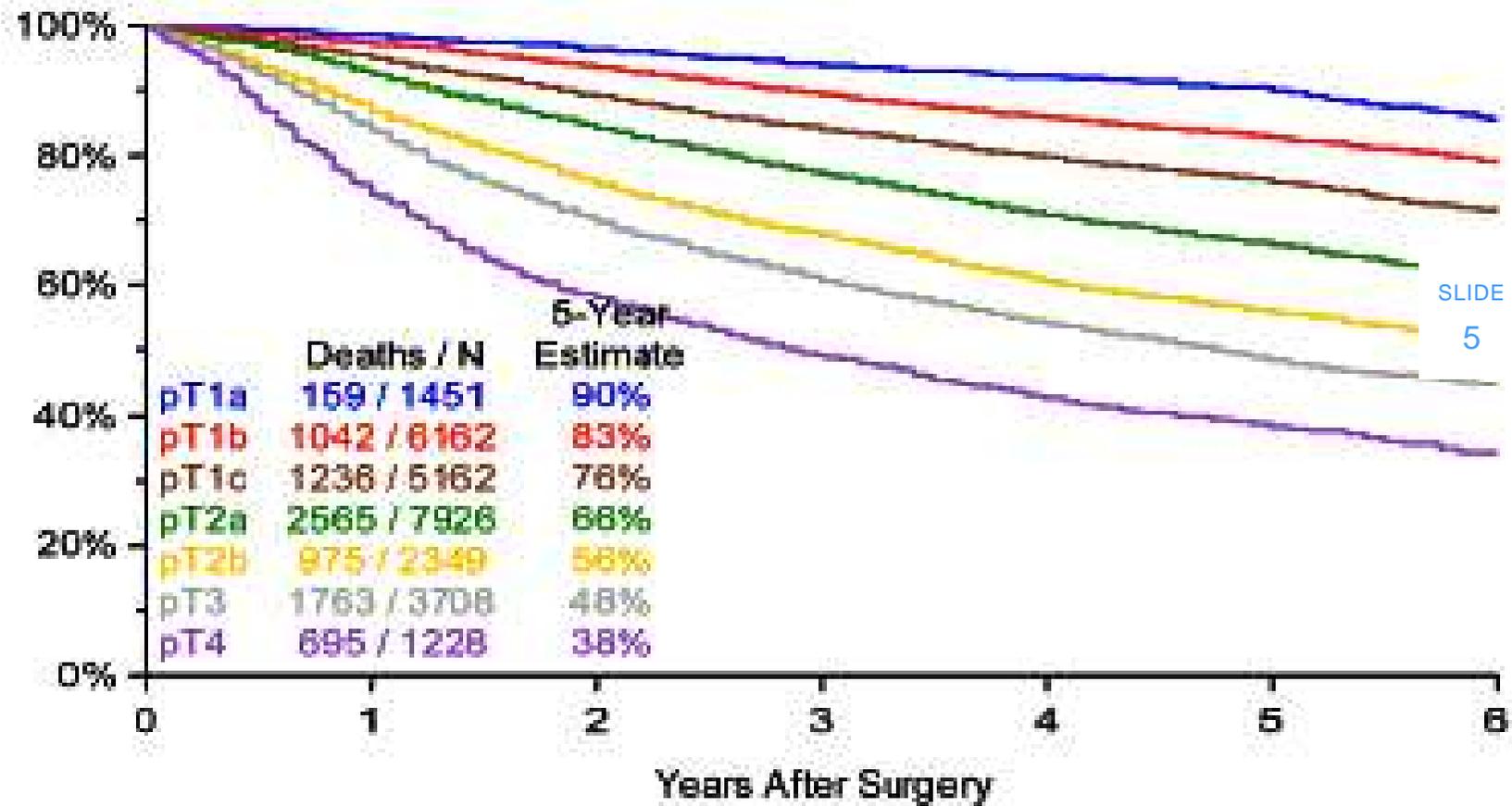
- La plus grande valeur, quelque soit le plan axial, sagittal ou coronal
- En fenêtré parenchymateuse, en particulier pour la partie solide des nodules mixtes

MODIFICATIONS DU T

		TNM – 7	TNM – 8
T1		< 3 cm	< 3 cm
T1	T1a	] 0-2 ]	] 0-1]
	T1b	] 2-3 ]	] 1-2]
	T1c	-	] 2-3]
T2		] 3-7 ]	] 3-5]
T2	T2a	] 3-5 ]	] 3-4]
	T2b	] 5-7 ]	] 4-5]
T3		> 7 cm	] 5-7]
T4		Dépendant de l'invasion locale et des nodules satellites	> 7 cm

SLIDE
4

PT1-4 M0R0 Cases (Any N)
Proposed T Status



MODIFICATIONS DU T

SLIDE 5

MODIFICATIONS DU T

- **Envahissement bronchique** = T2, indépendamment de la distance de la carène (TNM-7 : T2 si >2 cm de la carène, T3 si <2 cm).
- **Atélectasie ou pneumopathie** = T2, indépendamment de l'étendue (TNM-7 : T2 si partielle, T3 si complète)
- **Envahissement diaphragmatique** = T4 (TNM-7 : T3)
- **Envahissement de la plèvre médiastinale** ne rentre plus en compte dans le TNM - 8

MODIFICATIONS DU N

Classification :

- **N0** : pas de ganglion
- **N1** : ganglions intra-pulmonaires, péri-bronchiques ou hilaires homolatéraux
- **N2** : ganglions médiastinaux homolatéraux ou sous-carinaires
- **N3** : ganglions médiastinaux ou hilaires controlatéraux ou supra-claviculaires

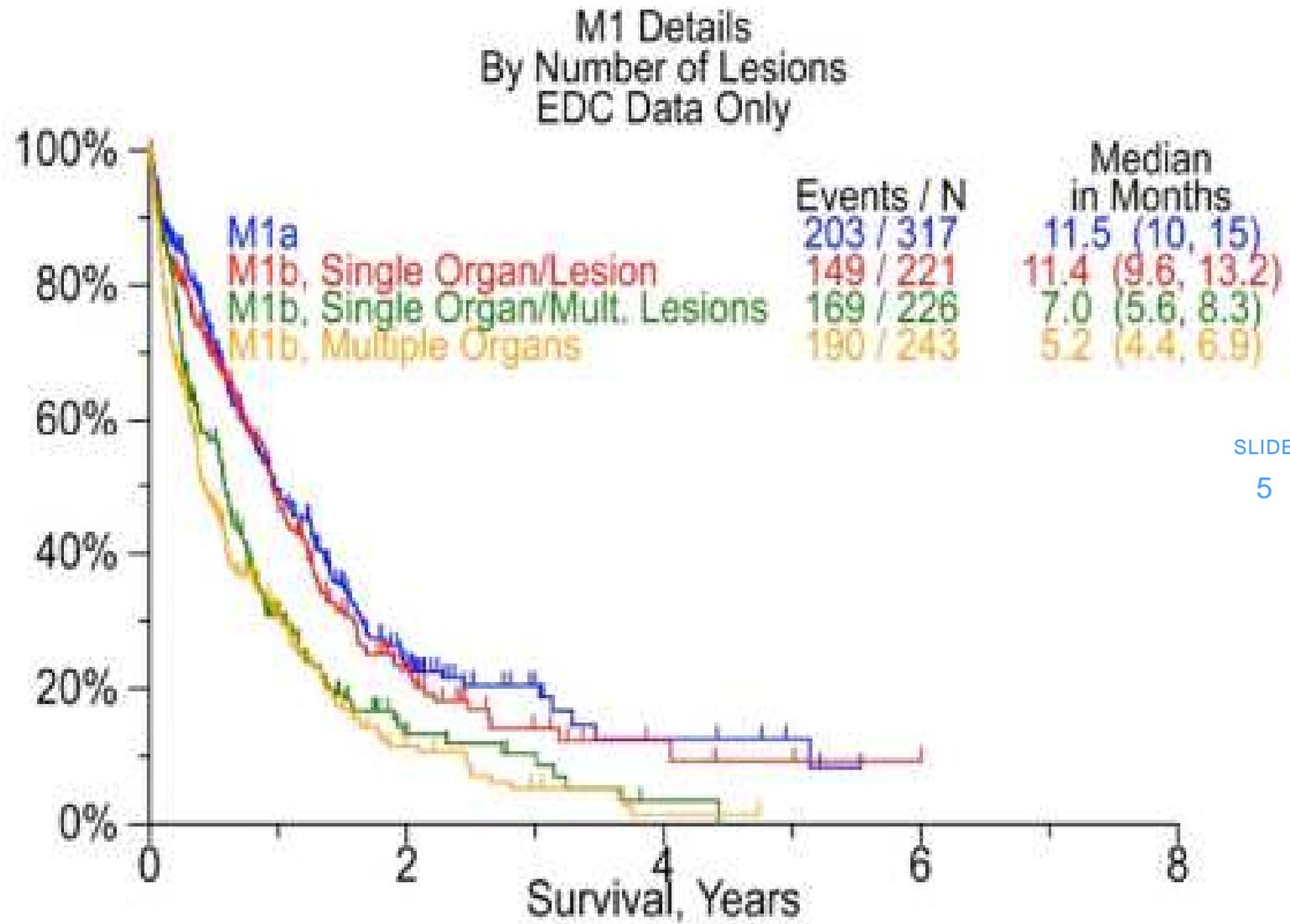
Des différences de survie mises en évidence mais non retenues :

- Nombre de ganglion atteint
- Existence de skip métastases

MODIFICATIONS DU N

		TNM – 7	TNM – 8
M0		Pas de métastase	Pas de métastase
M1		Métastases à distance	Métastases à distance
M1	M1a	Métastases intra-thoraciques	Métastases intra-thoraciques
	M1b	Métastases extra-thoraciques	Métastase extra-thoracique unique
	M1c	-	Métastases extra-thoraciques multiples

MODIFICATIONS DU T



SLIDE
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Goldstraw P et al. J Thorac Oncol 2016; 11 : 39-51

MODIFICATIONS DU STADE

Table 2: TNM Descriptors for TNM-8

Descriptor	Definition
T descriptor	
TX	Primary tumor cannot be assessed or tumor proven by the presence of malignant cells in sputum or bronchial washings but not visualized with imaging or bronchoscopy
T0	No evidence of primary tumor
Tis	Carcinoma in situ
T1	Tumor ≤ 3 cm in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus
T1a	Tumor ≤ 1 cm in greatest dimension
T1b	Tumor > 1 cm but ≤ 2 cm in greatest dimension
T1c	Tumor > 2 cm but ≤ 3 cm in greatest dimension
T2 descriptor	
T2	Tumor > 3 cm but ≤ 5 cm or tumor with any of the following features: involvement of a main bronchus regardless of the distance from the carina; invasion of the visceral pleura; associated with partial or complete lung atelectasis or pneumonitis
T2a	Tumor > 3 cm but ≤ 4 cm in greatest dimension
T2b	Tumor > 4 cm but ≤ 5 cm in greatest dimension
T3	Tumor > 5 cm but ≤ 7 cm in greatest dimension or one that directly invades any of the following structures: parietal pleura, chest wall (including superior sulcus tumors), phrenic nerve, parietal pericardium; or separate tumor nodule or nodules in the same lobe
T4	Tumor measuring >7 cm in greatest dimension that invades any of the following structures: mediastinum, diaphragm, heart, great vessels, trachea, recurrent laryngeal nerve, esophagus, vertebral body, carina; or separate tumor nodule or nodules in a different lobe of the same lung
N descriptor	
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, including involvement by direct extension
N2	Metastasis in ipsilateral mediastinal and/or subcarinal lymph nodes
N3	Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph nodes
M descriptor	
M0	No distant metastasis
M1	Distant metastasis
M1a	Separate tumor nodule or nodules in contralateral lung; malignant pleural effusion or pleural thickening or nodules or masses; malignant pericardial effusion or pericardial thickening or nodules or masses
M1b	Single distant (extrathoracic) metastasis in a single organ
M1c	Multiple distant (extrathoracic) metastases in a single organ or multiple organs

Source.—Reference 7.

Table 3: Stage Groups for TNM-8

Stage	Tumor	Node	Metastasis
Occult carcinoma	TX	N0	M0
Stage 0	Tis	N0	M0
Stage IA1	T1a(mi)*	N0	M0
	T1a	N0	M0
Stage IA2	T1b	N0	M0
Stage IA3	T1c	N0	M0
Stage IB	T2a	N0	M0
Stage IIA	T2b	N0	M0
Stage IIB	T1a–c	N1	M0
	T2a	N1	M0
	T2b	N1	M0
	T3	N0	M0
Stage IIIA	T1a–c	N2	M0
	T2a–b	N2	M0
	T3	N1	M0
	T4	N0	M0
	T4	N1	M0
Stage IIIB	T1a–c	N3	M0
	T2a–b	N3	M0
	T3	N2	M0
	T4	N2	M0
Stage IIIC	T3	N3	M0
	T4	N3	M0
Stage IVA	Any T	Any N	M1a
	Any T	Any N	M1b
Stage IVB	Any T	Any N	M1c

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*mi = minimally invasive.

MODIFICATIONS DU STADE

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T2b	Tumor > 4 cm but ≤ 5 cm in greatest dimension
T3	Tumor > 5 cm but ≤ 7 cm in greatest dimension or one that directly invades any of the following structures: parietal pleura, chest wall (including superior sulcus tumors), phrenic nerve, parietal pericardium; or separate tumor nodule or nodules in the same lobe
T4	Tumor measuring >7 cm in greatest dimension that invades any of the following structures: mediastinum, diaphragm, heart, great vessels, trachea, recurrent laryngeal nerve, esophagus, vertebral body, carina; or separate tumor nodule or nodules in a different lobe of the same lung
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	T2b	N1	M0
	T3	N0	M0
Stage IIIA	T1a–c	N2	M0
	T2a–b	N2	M0
	T3	N1	M0
	T4	N0	M0
	T4	N1	M0
Stage IIIB	T1a–c	N3	M0
	T2a–b	N3	M0
	T3	N2	M0
	T4	N2	M0
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	T2a	N1	M0
	T2b	N1	M0
	T3	N0	M0
Stage IIIA	T1a–c	N2	M0
	T2a–b	N2	M0
	T3	N1	M0
	T4	N0	M0
	T4	N1	M0
Stage IIIB	T1a–c	N3	M0
	T2a–b	N3	M0
	T3	N2	M0
	T4	N2	M0
Stage IIIC	T3	N3	M0
	T4	N3	M0
Stage IVA	Any T	Any N	M1a
	Any T	Any N	M1b
Stage IVB	Any T	Any N	M1c

Source.—Reference 7.

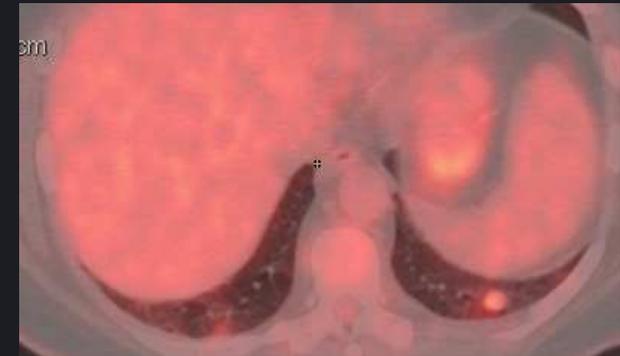
*mi = minimally invasive.

ILLUSTRATIONS

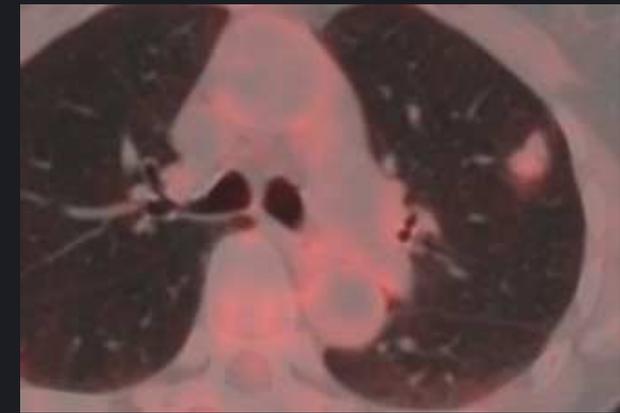
DU

TNM-8

T1A



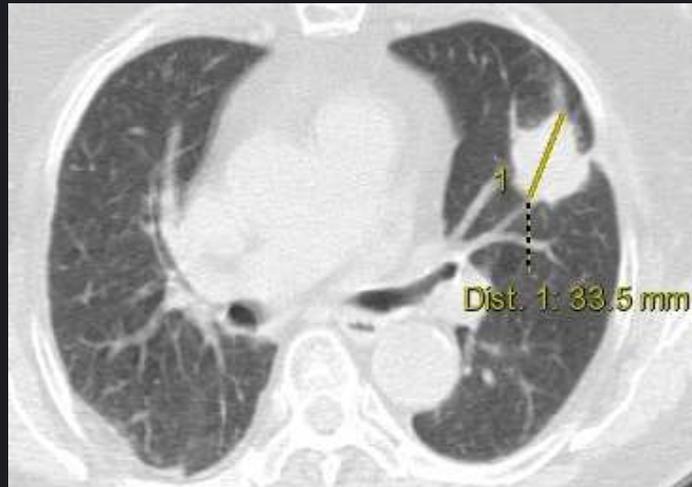
T1B



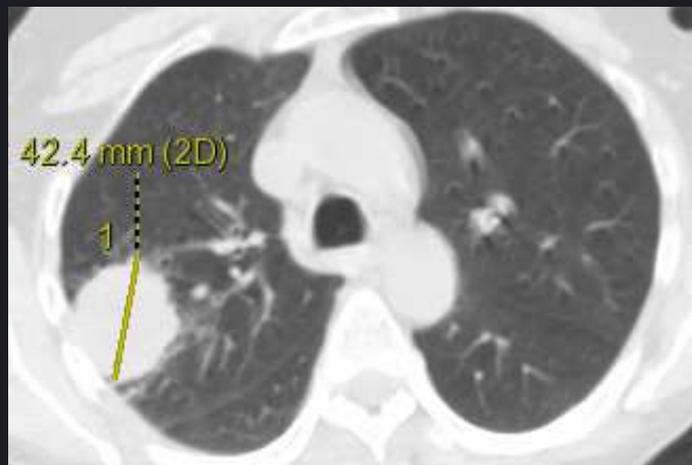
T1C



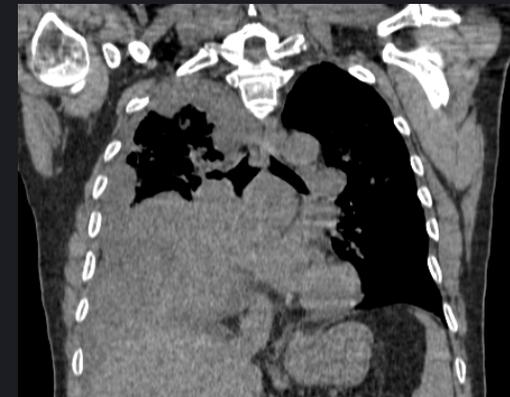
T2



T2a



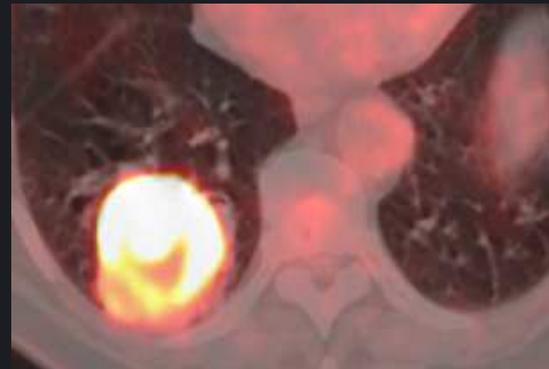
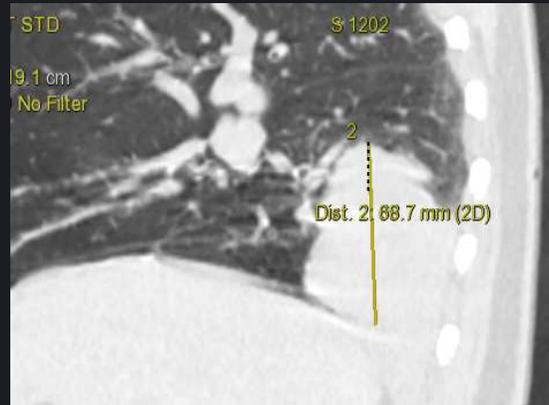
T2b



T2 : 3 à 5 cm ou

- Invasion d'une bronche principale
- Invasion plèvre viscérale
- **Atélectasie** ou pneumopathie partielle ou complète

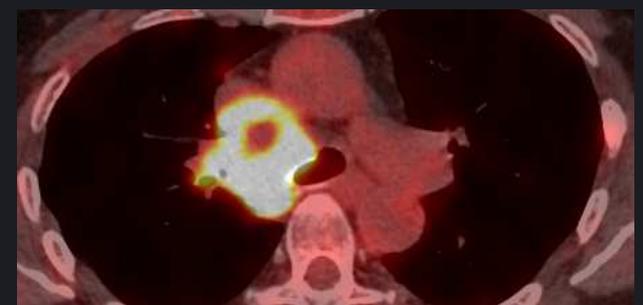
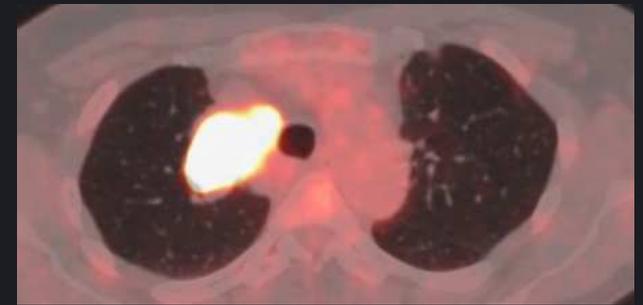
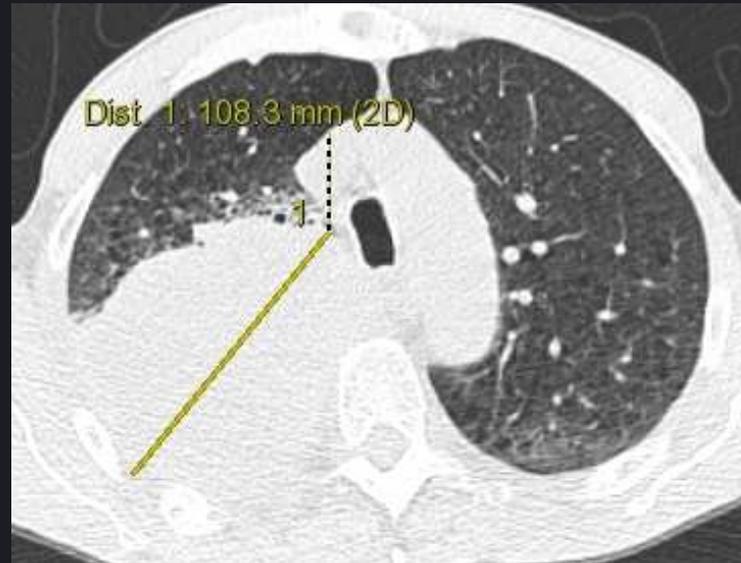
T3



T3 : 5 à 7 cm ou

- Invasion de la plèvre pariétale
- Invasion de la paroi thoracique
 - Atteinte péricardique
- Nodule dans le même lobe

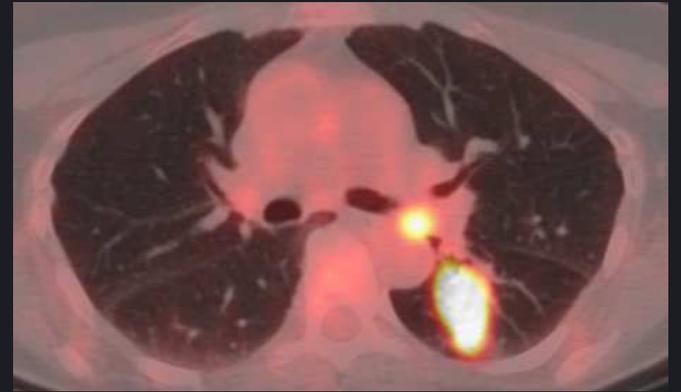
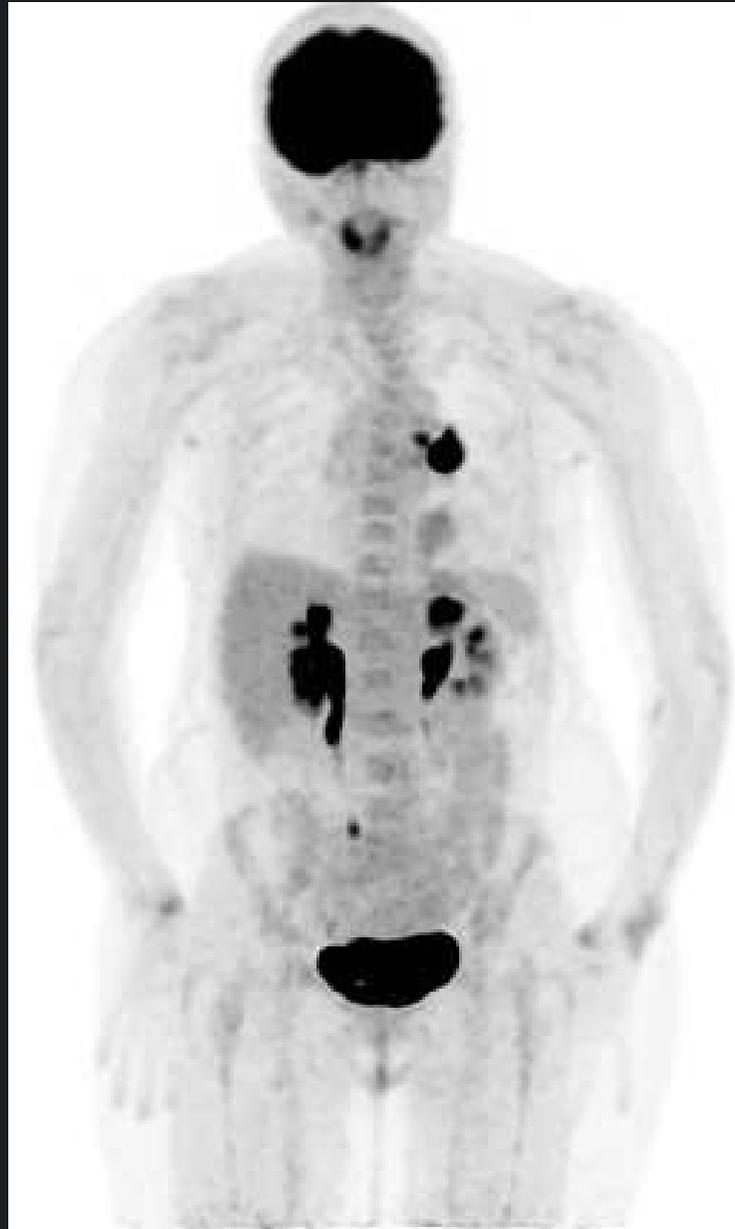
T4



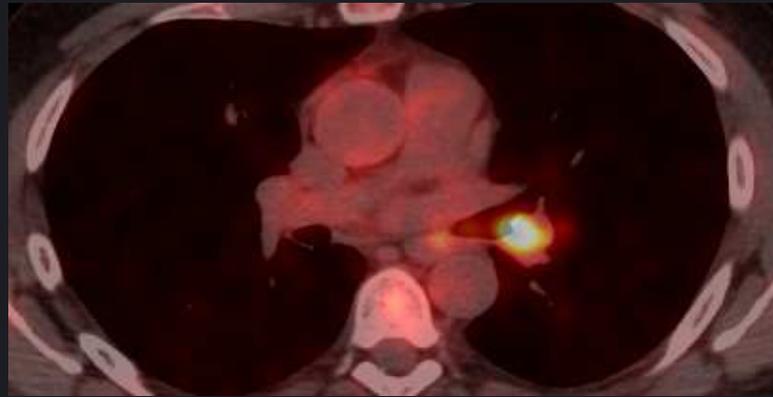
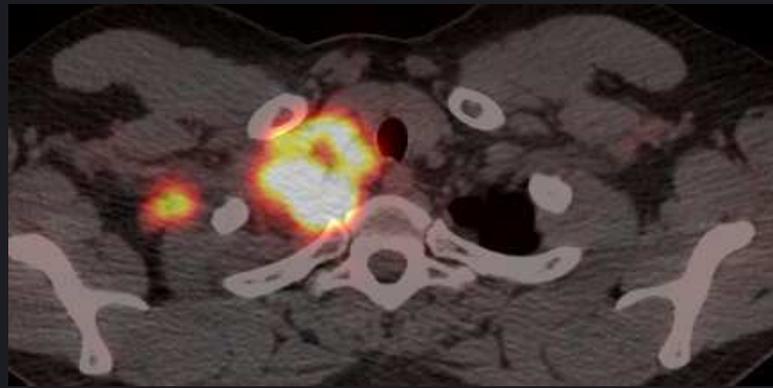
T4 : **> 7 cm** ou

- Invasion **médiastinale**
- Invasion **diaphragmatique**
- Cœur, gros vaisseaux, trachée, œsophage, carène, corps vertébral
- **Nodule** dans un **autre lobe** homolatéral

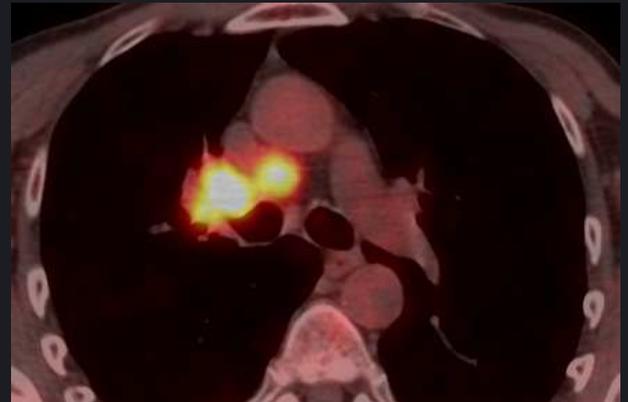
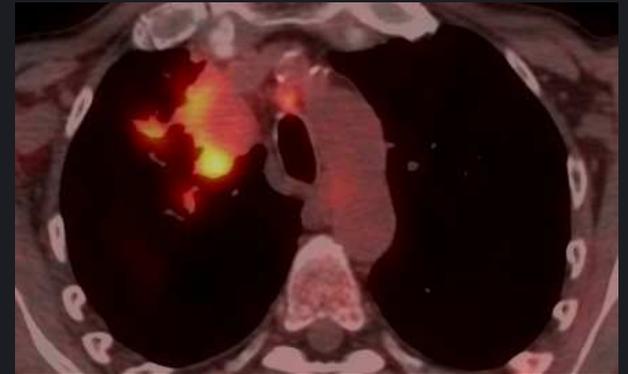
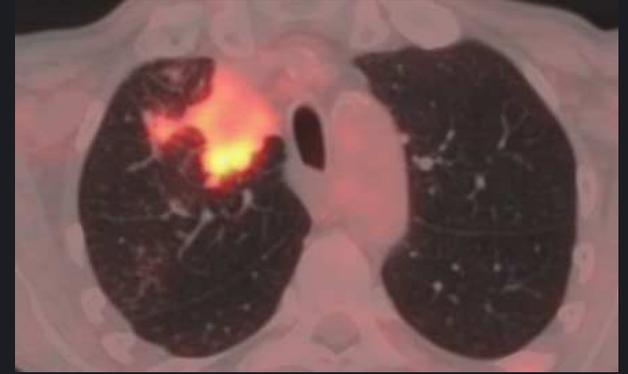
N2



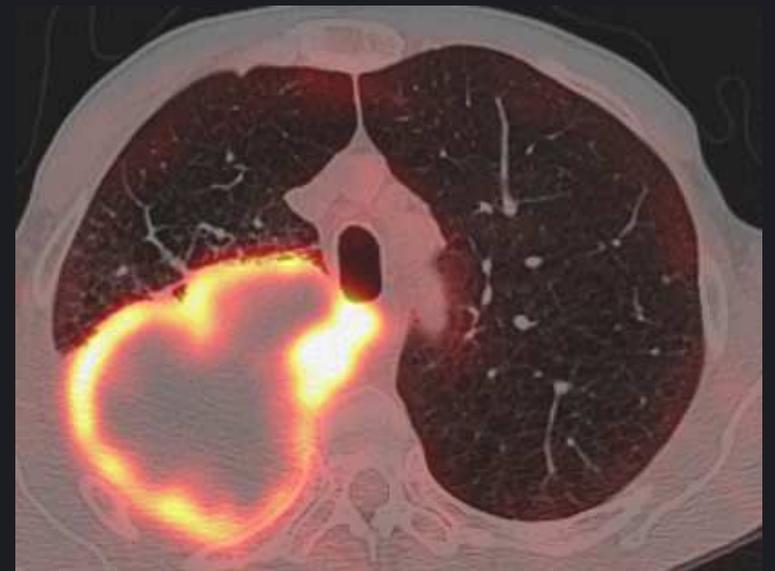
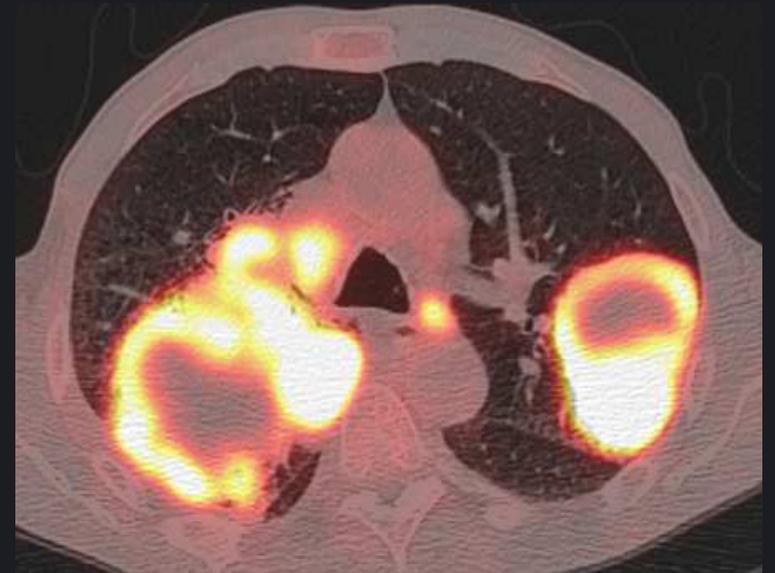
N3



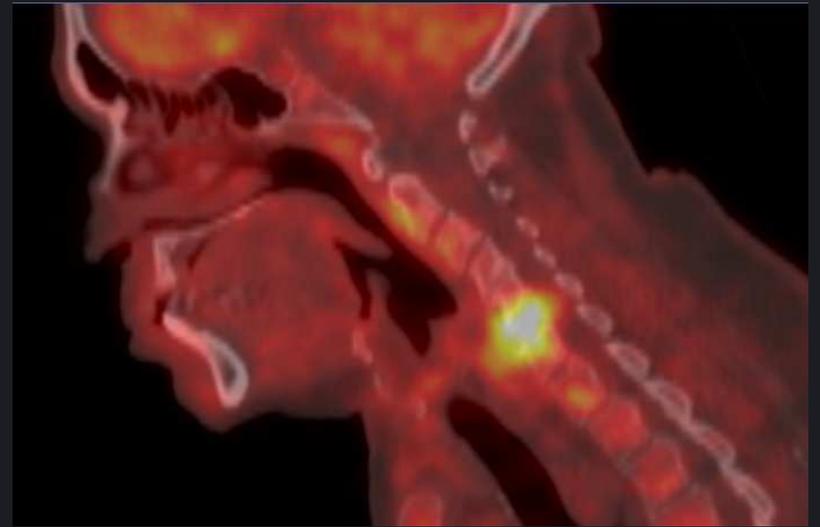
N2



M1A



M1B



M1C



LESIONS EN VERRE DEPOLI

- Correspondent généralement à un adénocarcinome mini invasif ou in situ
- Souvent chez les femmes et les non-fumeurs
- Moindre propension à un envahissement ganglionnaire ou métastatique
- Plus grande propension à développer de nouveaux nodules en verre dépoli/mixtes

CONDENSATION
PULMONAIRE

- Aspect de pneumopathie en dehors de toute invasion bronchique
- La plupart sont des adénocarcinomes mucineux invasifs
- Atteinte pulmonaire extensive
- Atteinte ganglionnaire et métastatique rare
- Progression lente mais pronostic plus défavorable comparativement aux lésions en verre dépoli

**CARCINOME A PETITES
CELLULES**

- Utilisation du TNM – 8 comme pour les CBNPC
- Pas de différence de survie entre M1b et M1c
sauf si l'atteinte unique est une atteinte cérébrale