



2023 World Conference
on Lung Cancer

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The 9th edition of TNM Classification for lung cancer

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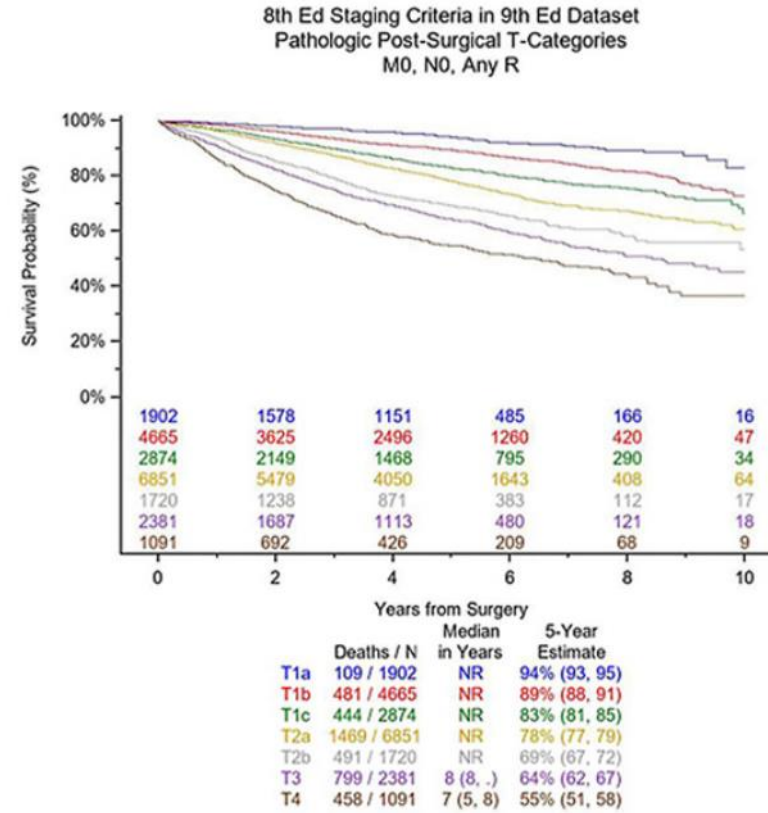
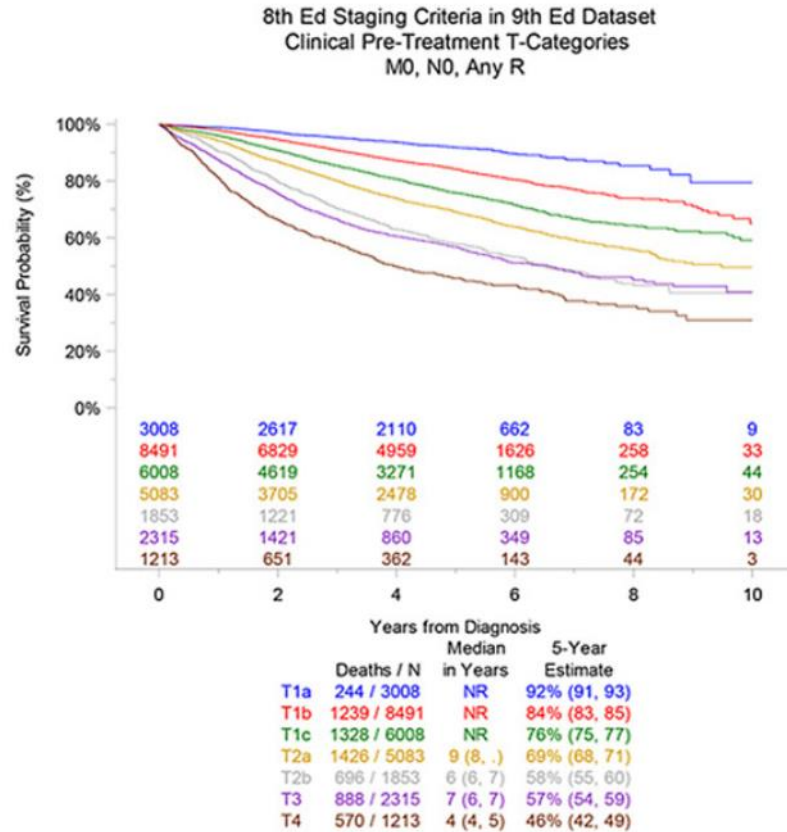


IASLC 9th Edition, T-category:

No change

Proposed 9 th Edition T-categories			9 th Edition
TX		Primary tumor cannot be assessed	No changes
T0		No evidence of primary tumor	No changes
Tis		Carcinoma in situ Tis(AIS): adenocarcinoma Tis(SCIS): squamous cell carcinoma	No changes
T1		Tumor 3 cm or less in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus (i.e., not in the main bronchus). The uncommon superficial spreading tumor of any size with its invasive component limited to the bronchial wall, which may extend proximal to the main bronchus, is also classified as T1a.	No changes
	T1mi	Minimally invasive adenocarcinoma	No changes
	T1a	Tumor 1 cm or less in greatest dimension	No changes
	T1b	Tumor more than 1 cm but not more than 2 cm in greatest dimension	No changes
	T1c	Tumor more than 2 cm but not more than 3 cm in greatest dimension	No changes
T2		Tumor more than 3 cm but not more than 5 cm; or tumor with any of the following features. T2 tumors with these features are classified T2a if 4 cm or less, or if size cannot be determined; and T2b if greater than 4 cm but not larger than 5 cm. <ul style="list-style-type: none"> • Involves main bronchus regardless of distance to the carina, but without involving the carina • Invades visceral pleura • Associated with atelectasis or obstructive pneumonitis that extends to the hilar region, either involving part of the lung or the entire lung 	No changes
	T2a	Tumor more than 3 cm but not more than 4 cm in greatest dimension	No changes
	T2b	Tumor more than 4 cm but not more than 5 cm in greatest dimension	No changes
T3		Tumor more than 5 cm but not more than 7 cm in greatest dimension or one that directly invades any of the following: parietal pleura (PL3), chest wall (including superior sulcus tumours), phrenic nerve, parietal pericardium; or associated separate tumor nodule(s) in the same lobe as the primary	No changes
T4		Tumors more than 7 cm or one that invades any of the following: diaphragm, mediastinum, heart, great vessels, trachea, recurrent laryngeal nerve, esophagus, vertebral body, carina; separate tumor nodule(s) in a different ipsilateral lobe to that of the primary	No changes

The IASLC Lung Cancer Staging Project: Proposals for the Revisions of the T Descriptors in the Forthcoming Ninth Edition of the TNM Classification for Lung Cancer



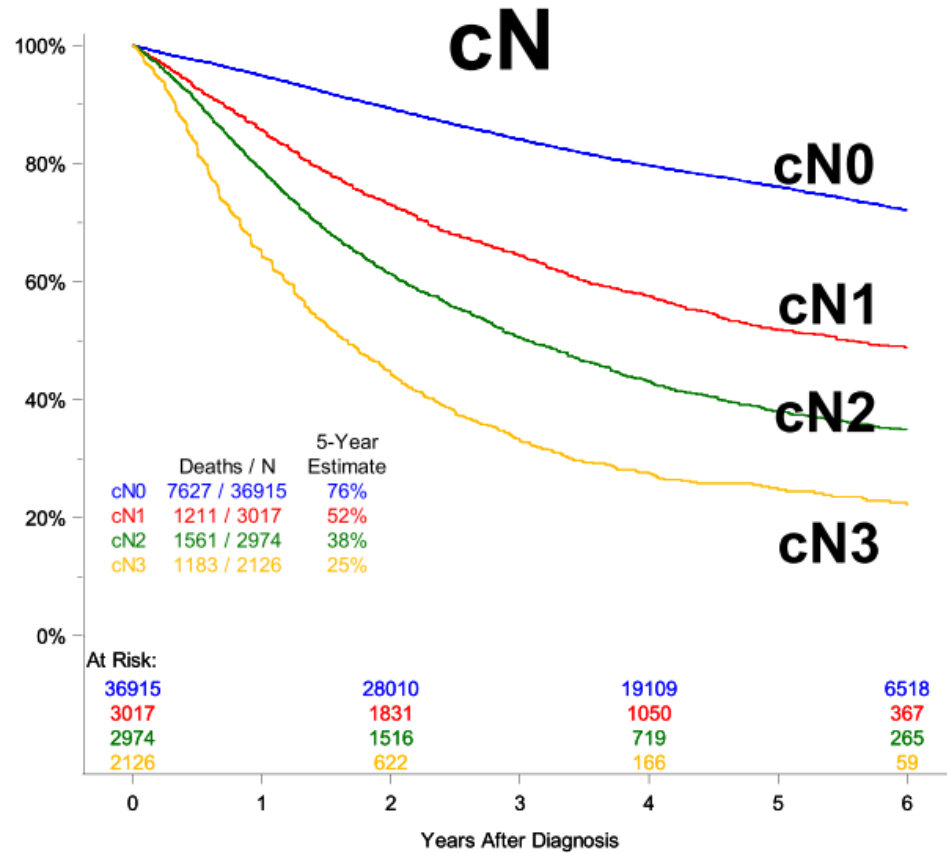
CONCLUSION: The IASLC T-subcommittee proposed not to implement any changes and keep the current 8th edition T-descriptors for the 9th edition.

IASLC 9th Edition, N-category: Split N2 into N2a and N2b

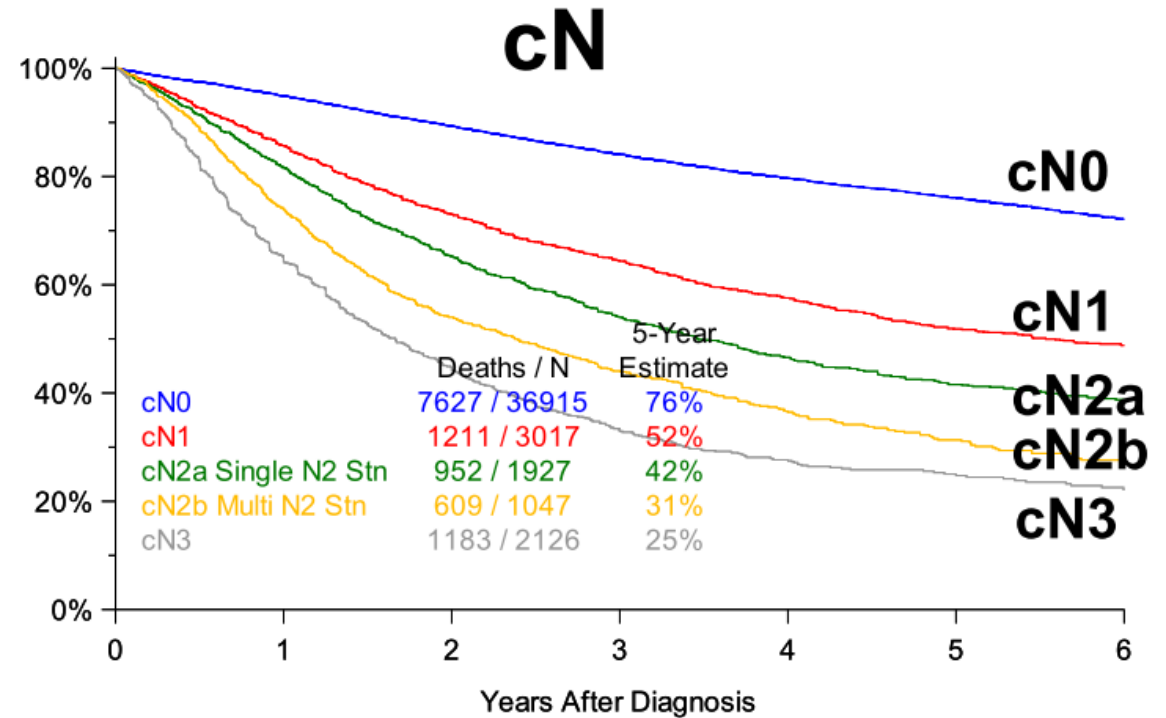
Proposed 9 th Edition N-categories			9 th Edition
NX		Regional lymph nodes cannot be assessed	No changes
N0		No regional lymph node metastasis	No changes
N1		Metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, including involvement by direct extension	No changes
N2		Metastasis in ipsilateral mediastinal and/or subcarinal lymph node(s)	
	N2a	Single N2 station involvement	Subdivided
	N2b	Multiple N2 station involvement	Subdivided
N3		Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph node(s)	No changes

IASLC 8th vs 9th Edition N-category - Clinical

8th Edition Clinical N-category



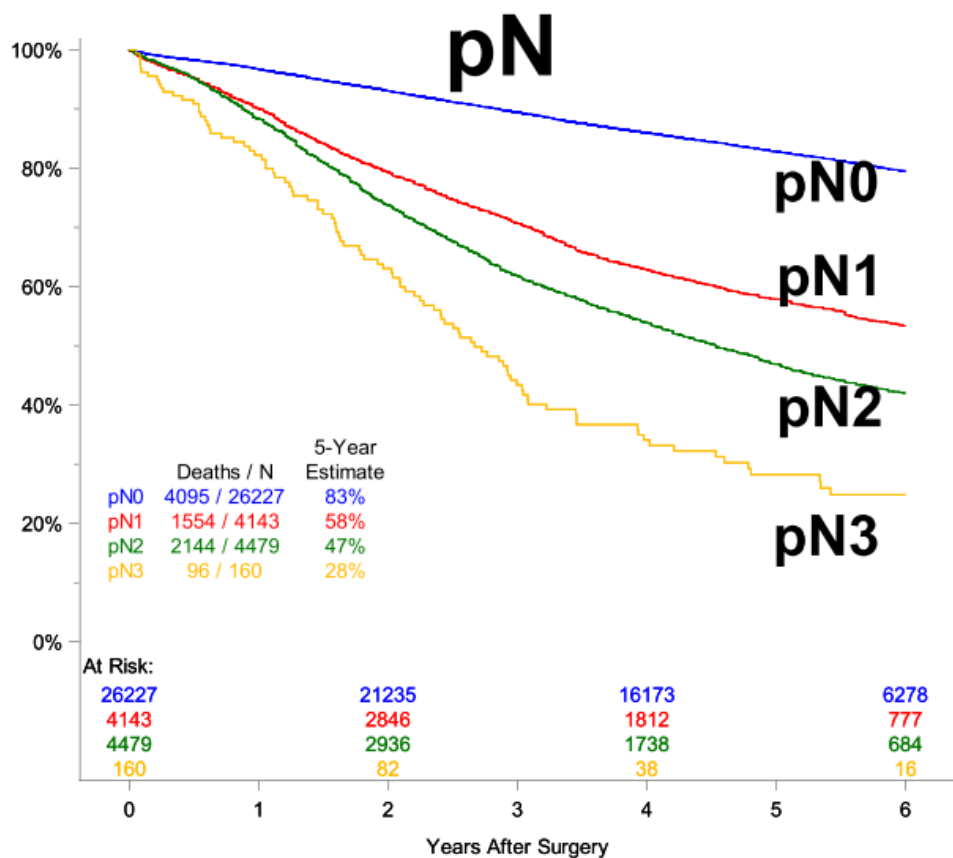
9th Edition Clinical N-category



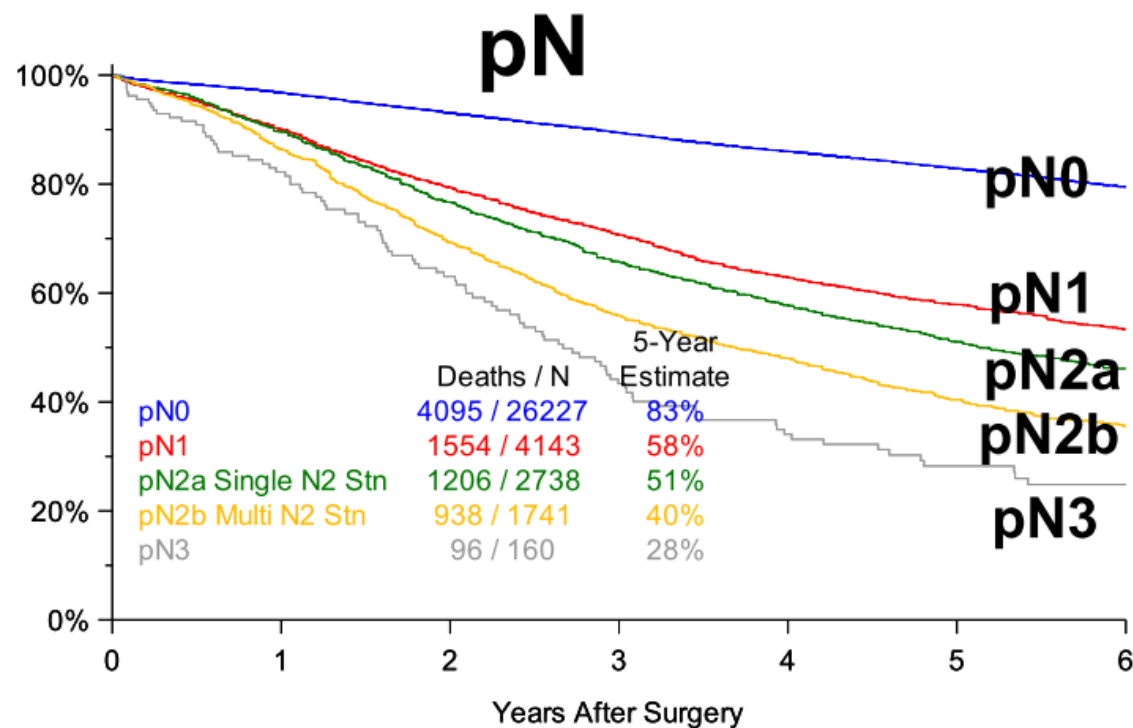
	cN (44,309 patients)	
9 th Ed Adjusted HR	HR (95% CI)	P-value
N1 vs N0	1.96 (1.84, 2.08)	<0.0001
N2a vs N1	1.42 (1.28, 1.56)	<0.0001
N2b vs N2a	1.27 (1.13, 1.43)	<0.0001
N3 vs N2b	1.51 (1.35, 1.70)	<0.0001

IASLC 8th vs 9th Edition N-category - Pathologic

8th Edition Pathologic N-category



9th Edition Pathologic N-category



	pN (34,379 patients)	
9th Ed Adjusted HR	HR (95% CI)	P-value
N1 vs N0	2.40 (2.26, 2.55)	<0.0001
N2a vs N1	1.45 (1.31, 1.60)	<0.0001
N2b vs N2a	1.46 (1.32, 1.62)	<0.0001
N3 vs N2b	1.62 (1.29, 2.03)	<0.0001

IASLC 9th Edition, M-category:

Divide M1c into two subcategories

Proposed 9 th Edition M-categories			9 th Edition
M0		No distant metastasis	No changes
M1		Distant metastasis	No changes
	M1a	Separate tumor nodule(s) in a contralateral lobe; tumor with pleural nodules or malignant pleural or pericardial effusion. Most pleural (pericardial) effusions with lung cancer are due to tumor. In a few patients, however, multiple microscopic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is non-bloody and is not an exudate. Where these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging descriptor.	No changes
	M1b	Single extrathoracic metastasis in a single organ and involvement of a single distant (non-regional) node	No changes
	M1c1	Multiple extrathoracic metastases in a single organ system	Subdivided
	M1c2	Multiple extrathoracic metastases in multiple organ systems	Subdivided

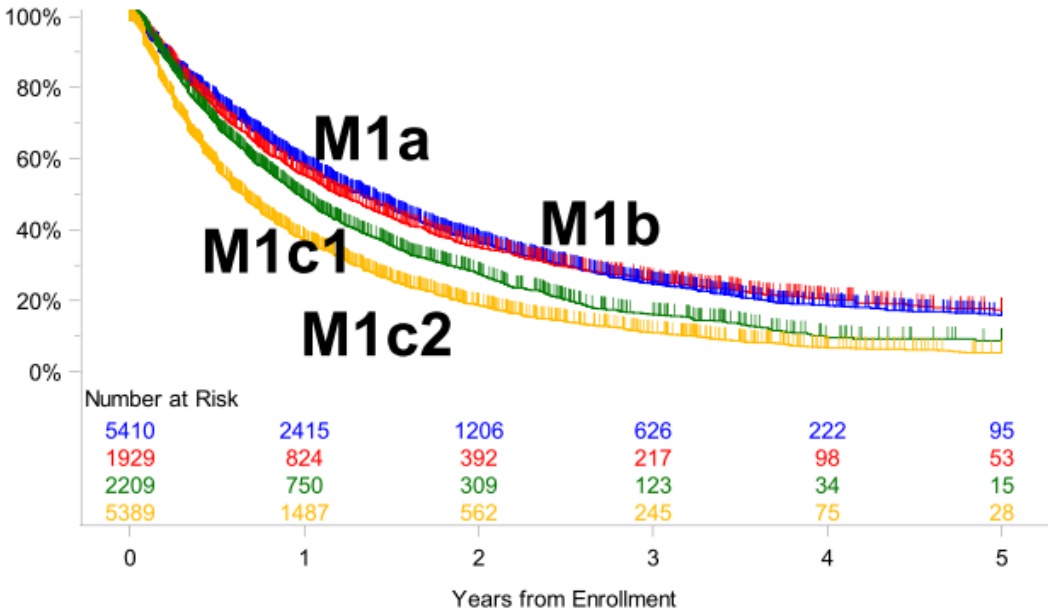
IASLC 8th vs 9th Edition M-category – Clinical: Divide M1c into two Subcategories

M1c1 = Multiple extrathoracic lesions in a single organ system,

M1c2 = Multiple extrathoracic lesions in multiple organ systems

M1a, M1b remain as previously defined.

Overall Survival by Proposed 9th Edition M Status
9th Edition Database



9 th Ed Adjusted HR	cM (14,937 patients)	
	HR (95% CI)	P-value
M1b vs M1a	1.06 (0.99, 1.13)	0.1101
M1c1 vs M1b	1.27 (1.17, 1.37)	<0.0001
M1c2 vs M1b	1.39 (1.31, 1.48)	<0.0001

Group	Deaths / N	Median in Years	2-Year Estimate
Group 1: M1A	3280 / 5410	1.3 (1.2, 1.4)	36% (35, 38)
Group 2: One site, one lesion	1158 / 1929	1.2 (1.1, 1.3)	35% (33, 38)
Group 3: One site, multiple lesions	1368 / 2209	1 (0.9, 1)	27% (25, 30)
Group 4: Multiple sites	3923 / 5389	0.6 (0.6, 0.7)	19% (17, 20)

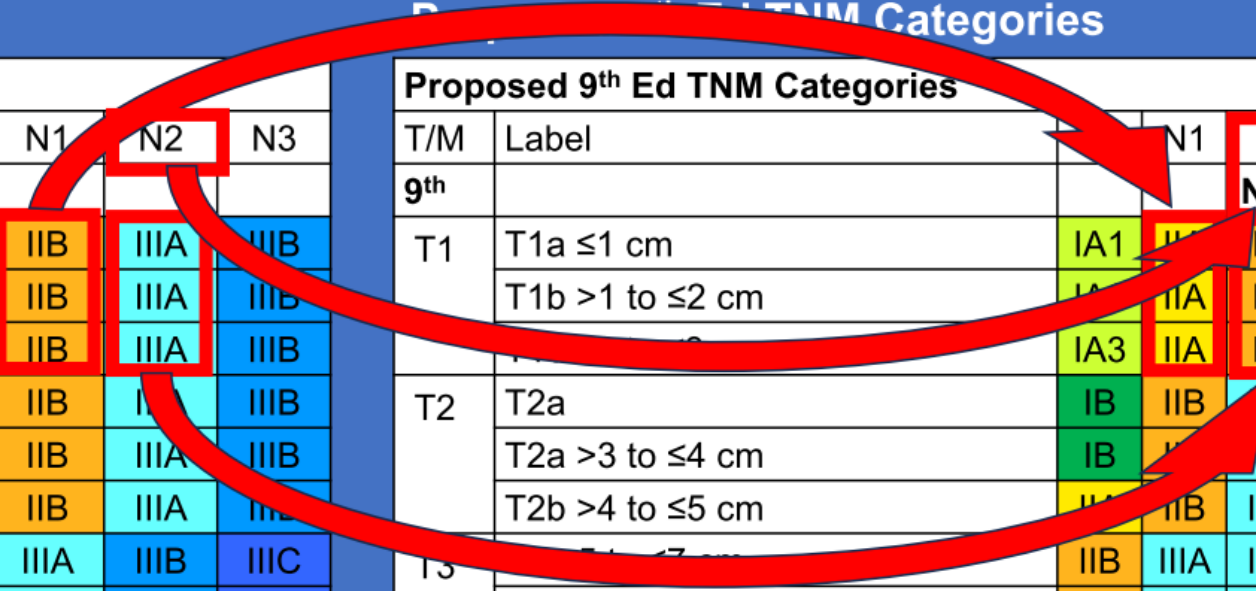
Log-rank p-value < .0001

8th Ed Categories

8th Ed TNM Categories					
T/M	Label	N0	N1	N2	N3
T1	T1a	IA1	IIB	IIIA	IIIB
	T1b	IA2	IIB	IIIA	IIIB
	T1c	IA3	IIB	IIIA	IIIB
T2	T2a	IB	IIB	IIIA	IIIB
	T2a >3-4	IB	IIB	IIIA	IIIB
	T2b >4-5	IIA	IIB	IIIA	IIIB
T3	T3 >5-7	IIB	IIIA	IIIB	IIIC
	T3 Inv	IIB	IIIA	IIIB	IIIC
	T3 Sat	IIB	IIIA	IIIB	IIIC
T4	T4 > 7	IIIA	IIIA	IIIB	IIIC
	T4 Inv	IIIA	IIIA	IIIB	IIIC
	T4 Ipsi Nod	IIIA	IIIA	IIIB	IIIC
M1	M1a Contr Nod	IVA	IVA	IVA	IVA
	M1a Pleur	IVA	IVA	IVA	IVA
	M1b Single Lesion	IVA	IVA	IVA	IVA
	M1c Multiple Lesions	IVB	IVB	IVB	IVB

Proposed 9th Ed TNM Categories

Proposed 9th Ed TNM Categories					
T/M	Label	N1	N2		N3
9th			N2a	N2b	
T1	T1a ≤1 cm	IA1	IIB	IIIA	IIIB
	T1b >1 to ≤2 cm	IA2	IIB	IIIA	IIIB
	T1c	IA3	IIB	IIIA	IIIB
T2	T2a	IB	IIB	IIIA	IIIB
	T2a >3 to ≤4 cm	IB	IIB	IIIA	IIIB
	T2b >4 to ≤5 cm	IIA	IIB	IIIA	IIIB
T3	T3 >5-7	IIB	IIIA	IIIB	IIIC
	T3 Invasion	IIB	IIIA	IIIB	IIIC
	T3 Satellite nodules	IIB	IIIA	IIIB	IIIC
T4	T4 > 7 cm	IIIA	IIIA	IIIB	IIIC
	T4 Invasion	IIIA	IIIA	IIIB	IIIC
	T4 Ipsilateral nodules	IIIA	IIIA	IIIB	IIIC
M1	M1a Contralateral nodules	IVA	IVA	IVA	IVA
	M1a Pleural, pericardial effusion	IVA	IVA	IVA	IVA
	M1b Single Extrathoracic Lesion	IVA	IVA	IVA	IVA
	M1c1 Mult. Lesions, Single Organ system	IVB	IVB	IVB	IVB
	M1c2 Mult. Lesions, Mult. Organ systems	IVB	IVB	IVB	IVB



8th Ed TNM Categories

8 th Ed TNM Categories					
T/M	Label	N0	N1	N2	N3
T1	T1a	IA1	IIB	IIIA	IIIB
	T1b	IA2	IIB	IIIA	IIIB
	T1c	IA3	IIB	IIIA	IIIB
T2	T2a Inv	IB	IIB	IIIA	IIIB
	T2a >3-4	IB	IIB	IIIA	IIIB
	T2b >4-5	IIA	IIB	IIIA	IIIB
T3	T3 >5-7	IIB	IIIA	IIIB	IIIC
	T3 Inv	IIB	IIIA	IIIB	IIIC
	T3 Same Lobe Nod	IIB	IIIA	IIIB	IIIC
T4	T4 >7	IIIA	IIIA	IIIB	IIIC
	T4 Inv	IIIA	IIIA	IIIB	IIIC
	T4 Ipsi Nod	IIIA	IIIA	IIIB	IIIC
M1	M1a Pl Dissem	IVA	IVA	IVA	IVA
	M1a Contr Nod	IVA	IVA	IVA	IVA
	M1b Single Les	IVA	IVA	IVA	IVA
	M1c Mult Les	IVB	IVB	IVB	IVB

Proposed 9th Ed TNM Categories

Proposed 9 th Ed TNM Categories						
T/M	Description	N0	N1	N2		N3
				N2a	N2b	
T1	T1a ≤1 cm	IA1	IIA	IIB	IIIA	IIIB
	T1b >1 to ≤2 cm	IA2	IIA	IIB	IIIA	IIIB
	T1c >2 to ≤3 cm	IA3	IIA	IIB	IIIA	IIIB
T2	T2a Visceral pleura / central invasion	IB	IIB	IIIA	IIIB	IIIB
	T2a >3 to ≤4 cm	IB	IIB	IIIA	IIIB	IIIB
	T2b >4 to ≤5 cm	IIA	IIB	IIIA	IIIB	IIIB
T3	T3 >5 to ≤7 cm	IIB	IIIA	IIIA	IIIB	IIIC
	T3 Invasion	IIB	IIIA	IIIA	IIIB	IIIC
	T3 Same lobe tumor nodule	IIB	IIIA	IIIA	IIIB	IIIC
T4	T4 >7 cm	IIIA	IIIA	IIIB	IIIB	IIIC
	T4 Invasion	IIIA	IIIA	IIIB	IIIB	IIIC
	T4 Ipsilateral tumor nodule	IIIA	IIIA	IIIB	IIIB	IIIC
M1	M1a Pleural / pericardial dissemination	IVA	IVA	IVA	IVA	IVA
	M1a Contralateral tumor nodule	IVA	IVA	IVA	IVA	IVA
	M1b Single extrathoracic lesion	IVA	IVA	IVA	IVA	IVA
	M1c1 Multiple lesions, 1 organ system	IVB	IVB	IVB	IVB	IVB
	M1c2 Multiple lesions, >1 organ system	IVB	IVB	IVB	IVB	IVB

Figure 2. Proposed ninth edition TNM stage groups. Mult, multiple.

TNM-9 stadieinddelings som mobil-tlf app

Udviklet til DLCG af MSD

1: T-, N- og M-stadie klassifikation

2: Stadiegruppering

3: Visual representation

TNM
guide

8th Edition TNM Lung Cancer Staging

Reference: Dansk Lunge Cancer Gruppe
(DLCG) – Lung Cancer – Visitation,
Diagnose, Stadie, Klinisk retningslinje,
2020:1-8



DK-NON-01472, 21. OKT 2024

Stadieinddeling af lungecancer

1: T-, N- og M-stadie klassifikation

2: Stadiegruppering

3: Visual representation

Stadieinddeling af lungecancer

1: T-, N- og M-stadie klassifikation

2: Stadiegruppering

3: Visual representation

1: T-, N- og M-stadie klassifikation

iht 2017-klassifikationen (8. udgave)

T (Primær-tumor)

Tx Primær-tumor kan ikke vurderes eller tumor påvist ved fund af maligne celler i ekspektorat eller bronkial skylvæske, men kan ikke visualiseres ved billedagnostik eller bronkoskopi. (Bør så vidt mulig ikke anvendes!*)

T0 Ingen påviselig primær-tumor.

Tis Carcinoma in situ.

Tis Carcinoma in situ.

T1 Tumor \leq 3 cm i største diameter, omgivet af lunge eller visceral pleura, uden bronkoskopisk påviselig invasion mere proksimalt end til lobære bronkus (dvs. ikke ind i hovedbronkus).¹

T1mi Minimalt invasivt adenocarcinom.²

T1a Tumor \leq 1 cm i største diameter.¹

T1b Tumor $>$ 1 cm, men \leq 2 cm i største diameter.¹

T1c Tumor $>$ 2 cm, men \leq 3 cm i største diameter.¹

T2 Tumor $>$ 3 cm, men \leq 5 cm, eller tumor med ethvert af følgende karakteristika:

- Involverer hovedbronkus uanset afstand til hovedcarina, men uden at involvere carina
- Invaderer viscerale pleura
- Associeret med atelektase eller obstruktiv pneumonitis, som når til hilusregionen og involverer en del af lungen eller hele lungen.

T2a Tumor $>$ 3 cm, men \leq 4 cm i største diameter

T2b Tumor $>$ 4 cm, men \leq 5 cm i største diameter

T3 Tumor $>$ 5 cm, men \leq 7 cm i største diameter eller en tumor som direkte invaderer en af følgende strukturer:

- parietal pleura, thoraxvæggen (inklusiv sulcus superior tumor, nervus phrenicus, parietale pericardium)
- eller én eller flere separate tumores i samme lungeflap.

T4 Tumor $>$ 7 cm, eller tumor af enhver størrelse som vokser ind i en af følgende strukturer:

- diafragma, mediastinum, hjertet, de store kar, trachea, nervus recurrens, esophagus, vertebrae, hovedcarina;
- eller én eller flere separate tumores i en anden ipsilateral lungeflap.

N (Regionale Lymfeknuder)

Nx Regionale lymfeknuder kan ikke vurderes. (Bør så vidt mulig ikke anvendes!)

N0 Ingen regionale lymfeknude-metastaser.

N1 Metastase i ipsilaterale peribronkiale og/eller ipsilaterale hilære lymfeknuder og intrapulmonale lymfeknuder, herunder involvering ved direkte udbredelse.

N2 Metastase i ipsilaterale mediastinale og/eller subcarinale lymfeknuder.

N3 Metastase i kontralaterale mediastinale, kontralaterale hilære, ipsilaterale eller kontralaterale scalener eller supraklavikulære lymfeknuder.

M (Metastaser)

M0 Ingen metastaser.

M1 Metastase(r)

M1a Én eller flere separate tumores i en kontralateral lungeflap; tumor med pleurale eller perikardielle knuder eller malign pleural eller perikardiel effusion.

M1b Én enkelt ekstrathoracal metastase – herunder i fjernere liggende lymfeknuder end N3

M1c Flere ekstrathoracale metastaser – herunder i fjernere liggende lymfeknuder end N3

2: Stadiegruppering

i henhold til 2017-klassifikationen (8. udgave)

Table 2-1

Table 2-2

Table 2-3

Occult cancer	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

2: Stadiegruppering

i henhold til 2017-klassifikationen (8. udgave)

Table 2-1

Table 2-2

Table 2-3

T/M	N0	N1	N2	N3
Tis	0	-	-	-
T1a	IA1	IIB	IIIA	IIIB
T1b	IA2	IIB	IIIA	IIIB
T1c	IA3	IIB	IIIA	IIIB
T2a	IB	IIB	IIIA	IIIB
T2b	IIA	IIB	IIIA	IIIB
T3	IIB	IIIA	IIIB	IIIC
T4	IIIA	IIIA	IIIB	IIIC
M1a	IVA	IVA	IVA	IVA
M1b	IVA	IVA	IVA	IVA
M1c	IVB	IVB	IVB	IVB

Rødt markerer nye T-, M- og Stadiedefinitioner

2: Stadiegruppering




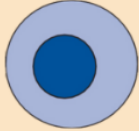
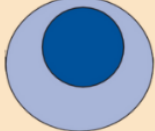
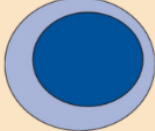
i henhold til 2017-klassifikationen (8. udgave)

Table 2-1

Table 2-2

Table 2-3

8th Edition TNM Classification of Lung Nonmucinous AIS, MIA, and Lepidic Predominant Adenocarcinoma

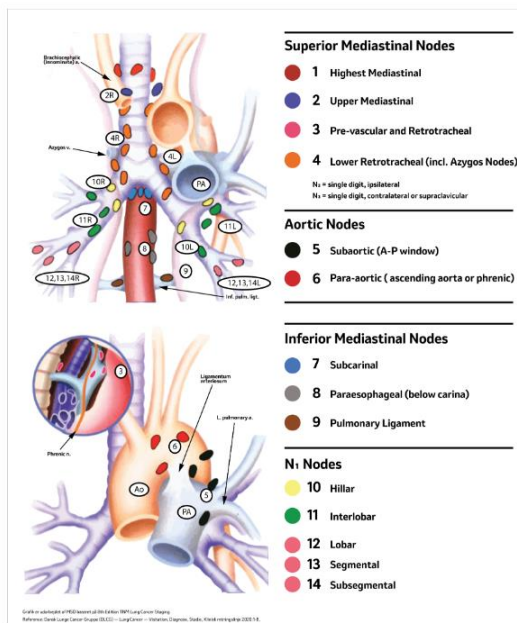
	CT image on HRCT						
	Solid part	0 cm	0 cm	< 0.5 cm [†]	0.6–1.0 cm [†]	1.1–2.0 cm [†]	2.1–3.0 cm [†]
cT*	Total tumor size including GG	≤ 0.5 cm	0.6–3.0 cm ^{††}	≤ 3.0 cm ^{††}	0.6–3.0 cm ^{††}	1.1–3.0 cm ^{††}	2.1–3.0 cm ^{††}
	Pathologic Differential Diagnosis	AAH [‡] , AIS, MIA	AIS, MIA, LPA	MIA, LPA, AIS	LPA, Invasive AD, MIA	LPA, Invasive AD	Invasive AD
	Clinical Stage*		cTis ^{††}	cT1mi ^{††}	cT1a	cT1b	cT1c

Stadieinddeling af lungecancer

1: T-, N- og M-stadie klassifikation

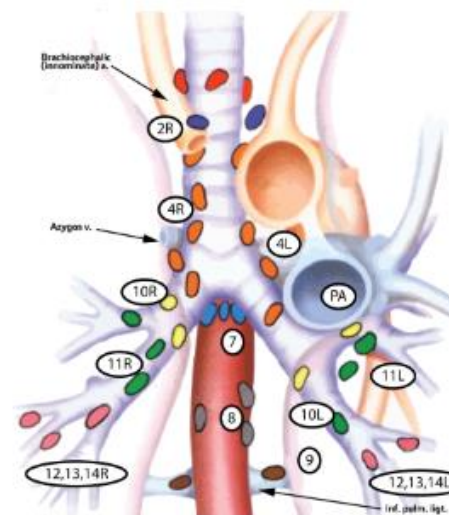
2: Stadiegruppering

3: Visual representation



8th Edition TNM Lung Cancer Staging

Reference: Dansk Lung Cancer Gruppe (DLCC) – Lung Cancer – Visitation,



Superior Mediastinal Nodes

- 1 Highest Mediastinal
- 2 Upper Mediastinal
- 3 Pre-vascular and Retrotracheal
- 4 Lower Retrotracheal (incl. Azygos Nodes)

N₁ = single digit, ipsilateral
N₂ = single digit, contralateral or supraclavicular

Aortic Nodes

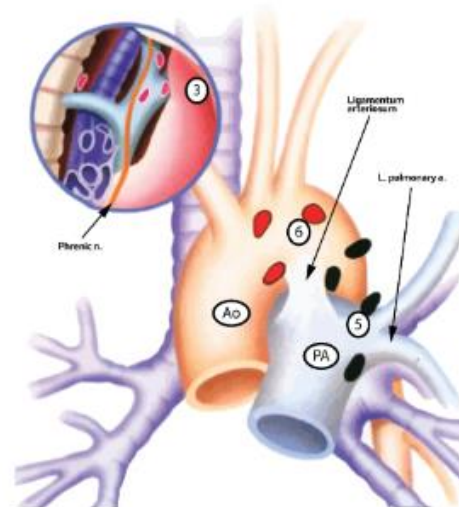
- 5 Subaortic (A-P window)
- 6 Para-aortic (ascending aorta or phrenic)

Inferior Mediastinal Nodes

- 7 Subcarinal
- 8 Paraesophageal (below carina)
- 9 Pulmonary Ligament

N₁ Nodes

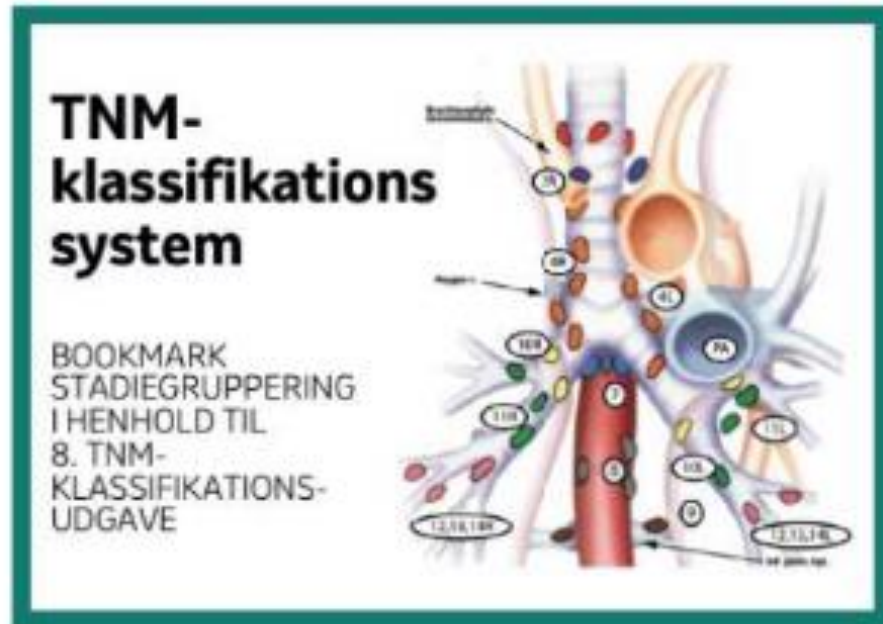
- 10 Hillar
- 11 Interlobar
- 12 Lobar
- 13 Segmental
- 14 Subsegmental



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Reference: Dansk Lung Cancer Gruppe (DLCC) – Lung Cancer – Visitation, Diagnose, Stadi, Klinisk retningslinje 2020:14

<https://cloud.mail.msd.dk/stadieinddeling-af-lungecancer>

DK-P00-00005 NOV 14 2024




<https://link.msd.dk/DLCG2024>


Bookmark TNM på din telefon:

Du kan selv vælge et navn til din genvej når du tilføjer TNM til hjemmeskærmen

iOS (apple)

1. Scan QR koden
2. Tryk på  nederst
3. Nederst på listen kan du tilføje til hjemmeskærm

Android

1. Scan QR koden
2. Tryk på  øverst
3. Tilføj til hjemmeskærm