

TNM Classification of Malignant Tumours - 7th edition

Outline of changes between 6th and 7th editions



international union
against cancer

Highlights

- 9 new classifications
- 6 major modifications
- Elimination of MX
- Introduction of Anatomical Stage Grouping and Prognostic Grouping

TNM-7 New classifications

- Melanoma of upper aerodigestive tract
- Gastroesophageal carcinomas
- Gastrointestinal stromal tumours (GISTs)
- Appendix: carcinomas
- Neuroendocrine tumours:
stomach, intestines, appendix; pancreas; lung
- Intrahepatic cholangiocarcinoma
- Merkel cell carcinoma
- Uterine sarcomas
- Adrenal cortex

TNM-7 Major modifications

- Esophagus
- Stomach
- Lung
- Skin
- Vulva
- Prostate

Elimination of MX

The use of MX may result in exclusion from staging

cMX is inappropriate as the clinical assessment of metastasis can be based on physical examination alone.

If the pathologist does not have knowledge of the clinical M, MX should NOT be recorded. It has been deleted from TNM.

pMX: does not exist; pM0: does not exist (except at autopsy)

Elimination of MX

What remains:

cM0 = clinically no distant metastasis

cM1 = distant metastasis clinically, e.g., colon cancer with liver metastasis based on CT

pM1 = distant metastasis proven microscopically, e.g., needle biopsy

If a cM1 (e.g., liver met) is biopsied and is negative, it becomes cM0, not pM0

Stage Grouping and Prognostic Grouping

Stage grouping:

- Anatomical extent of disease, composed of T, N, and M categories alone

Prognostic Grouping:

- T, N, and M *plus* other prognostic factors

For most tumour sites only the (Anatomical) Stage Grouping is given

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WHO 2000

Oesophagogastric junction tumours

Definition

Adenocarcinomas that straddle the junction of the oesophagus and stomach are called tumours of the oesophagogastric (OG) junction. This definition includes many tumours formerly called cancers of the gastric cardia.

Squamous cell carcinomas that occur at the OG junction are considered carcinomas of the distal oesophagus, even if they cross the OG junction.

TNM-7

Oesophagogastric junction tumours

A tumour the epicenter of which is within 5 cm of the esophagogastric junction and also extends into the oesophagus is classified and staged according to the **oesophageal** scheme

All other tumours with an epicenter in the stomach greater than 5 cm from the oesophagogastric junction or those within 5 cm of the EGJ *without* extension into the oesophagus are staged using the **gastric** carcinoma scheme

Oesophagus 7th edition

TNM definitions: AJCC = UICC

Tis	Carcinoma in situ / High-grade dysplasia
T1	lamina propria or submucosa T1a lamina propria or muscularis mucosae T1b submucosa
T2	muscularis propria
T3	adventitia
T4	adjacent structures T4a pleura, pericardium, diaphragm, or adjacent peritoneum T4b other adjacent structures, e.g. aorta, vertebral body, trachea

N0	No regional lymph node metastasis
N1	1 to 2 regional lymph nodes
N2	3 to 6
N3	>6

[N1 was site dependent]

M - Distant Metastasis

M1 **Distant metastasis**

[M1a,b were site dependent]

Changes from 6th edition

Oesophagus 7th edition

Anatomical Stage Groups (adeno & squamous) [UICC]

Stage IA	T1	N0	M0
Stage IB	T2	N0	M0
Stage IIA	T3	N0	M0
Stage IIB	T1, T2	N1	M0
Stage IIIA	T4a	N0	M0
	T3	N1	M0
	T1, T2	N2	M0
Stage IIIB	T3	N2	M0
Stage IIIC	T4a	N1, N2	M0
	T4b	Any N	M0
	Any T	N3	M0
Stage IV	Any T	Any N	M1

Major changes

Oesophageal Squamous Cell Carcinoma

Prognostic Grouping

[AJCC adds type, grade & site]

	T	N	M	Grade	Location
Stage IA	1	0	0	1,X	Any
IB	1	0	0	2,3	Any
	2, 3	0	0	1,X	Lower
Stage IIA	2, 3	0	0	1,X	Upper, middle
	2, 3	0	0	2,3	Lower
Stage IIB	2, 3	0	0	2,3	Upper, middle
	1, 2	1	0	Any	Any
Stage IIIA	1,2		2	0	Any
	3	1	0	Any	Any
	4a	0	0	Any	Any
Low Stages: AJCC not all = UICC.			Stages IIIA,B, C & IV: AJCC=UICC		

Oesophageal Adenocarcinoma

Prognostic Grouping

[AJCC adds type & grade]

	T	N	M	Grade
Stage IA	1	0	0	1, 2, X
Stage IB	1	0	0	3
	2	0	0	1, 2, X
Stage IIA	2	0	0	3
Stage IIB	3 (IIA)	0	0	Any
	1, 2	1	0	Any
Stage IIIA	1, 2	2	0	Any
	3	1	0	Any
	4a	0	0	Any
Stage IIIB, IIIC, & IV...				
Low Stages: AJCC not all = UICC.			Stages IIIB, C & IV:	
AJCC=UICC				

Stomach 7th edition

T1 Lamina propria, submucosa

T1a Lamina propria

T1b Submucosa

T2 Muscularis propria

T3 Subserosa (*was T2b*)

T4a Perforates serosa (*was T3*)

T4b Adjacent structures

N1 1 to 2 nodes

N2 3 to 6 nodes (*was N1*)

N3a 7 - 15 nodes (*was N2*)

N3b 16 or more (*was N3*)

Changes from 6th edition

Stage IA T1 N0

Stage IB T2 N0

T1 N1

Stage IIA T3 N0

T2 N1

T1 N2

Stage IIB T4a N0

T3 N1

T2 N2

T1 N3

Stage IIIA T4a N1

T3 N2

T2 N3

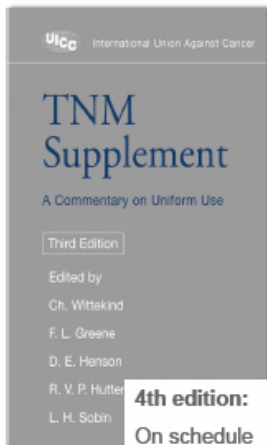
Stages IIIB, IIIC, IV...

Stages: most changed

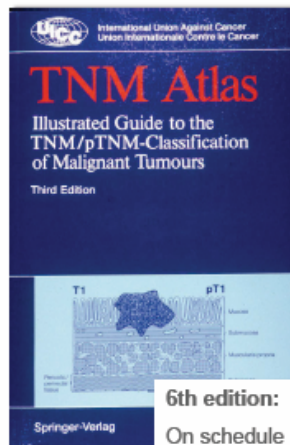
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TNM classification

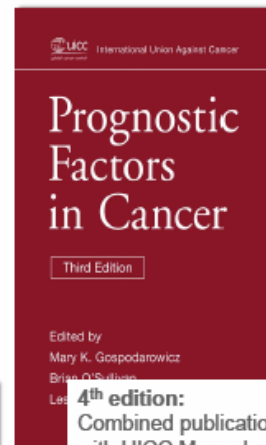
Coming Soon



4th edition:
On schedule
for Dec 2009
submission



6th edition:
On schedule
for 2010
submission



4th edition:
Combined publication
with UICC Manual of
Clinical Oncology
planned