Pathological staging (Core)

The Union for International Cancer Control (UICC)[1]/American Joint Committee on Cancer (AJCC)[2] 8th edition Staging Systems for gastric carcinoma are recommended (Figures 5 and 6).

According to the UICC/AJCC convention, the designation 'T' refers to a primary tumour that has not been previously treated. The symbol 'p' refers to the pathologic classification of the TNM, as opposed to 'c' which refers to the clinical classification, and is based on gross and microscopic examination of surgically resected specimens.[1,2] pT entails a resection of the primary tumour adequate to evaluate the highest pT category, pN entails removal of nodes adequate to validate lymph node metastasis, and pM implies microscopic examination of distant lesions.

TNM Descriptors

For identification of special cases of TNM or pTNM classifications, the 'm' suffix and 'y', and 'r' prefixes are used.

The 'm' suffix indicates the presence of multiple primary tumours in a single site. For multifocal gastric cancers, T is assigned to the highest T category.

The 'y' prefix indicates those cases in which classification is performed after neoadjuvant therapy. The ypTNM categorises the extent of tumour actually present at the time of that examination. The 'y' categorisation is not an estimate of tumour before neoadjuvant therapy.

The 'r' prefix indicates a recurrent tumour when staged after a documented disease-free interval and is identified by the 'r' prefix: rTNM.

A tumour may penetrate the muscularis propria with extension into the gastrocolic or gastrohepatic ligaments, or into the greater or lesser omentum, without perforation of the visceral peritoneum covering these structures. In this case, the tumour is classified as T3.

N Category considerations

As per AJCC 8th edition,[2] a designation of N0 should be used if all examined lymph nodes are negative, regardless of the total number removed and examined.

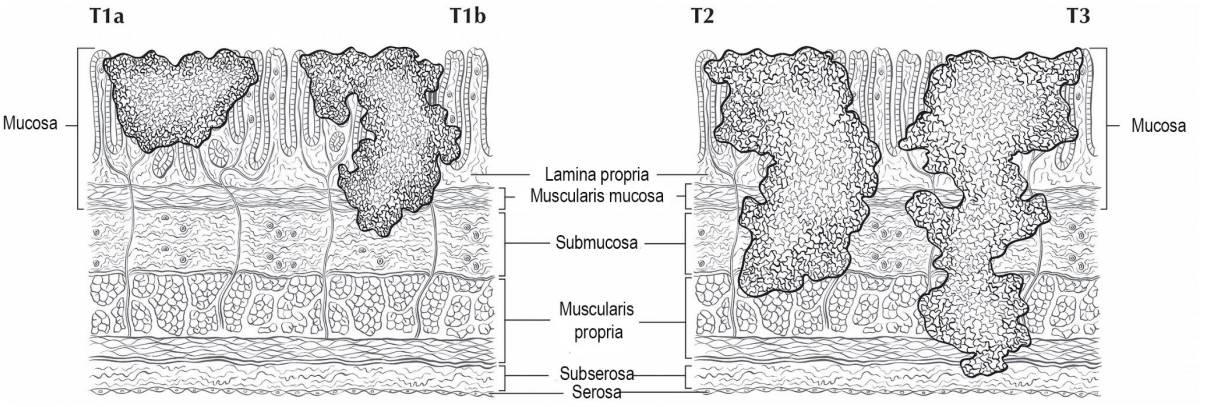


Figure 5: T1a is defined as tumour that invades the lamina propria. T1b is defined as tumour that invades the submucosa. T2 is defined as tumour that invades the muscularis propria, whereas T3 is defined as tumour that extends through the muscularis propria into the subserosal tissue. Used with permission of the American College of Surgeons, Chicago, Illinois. The original source for this information is the American Joint Committee on Cancer Staging Manual, Eighth Edition (2016) published by Springer Science+Business Media.[2]

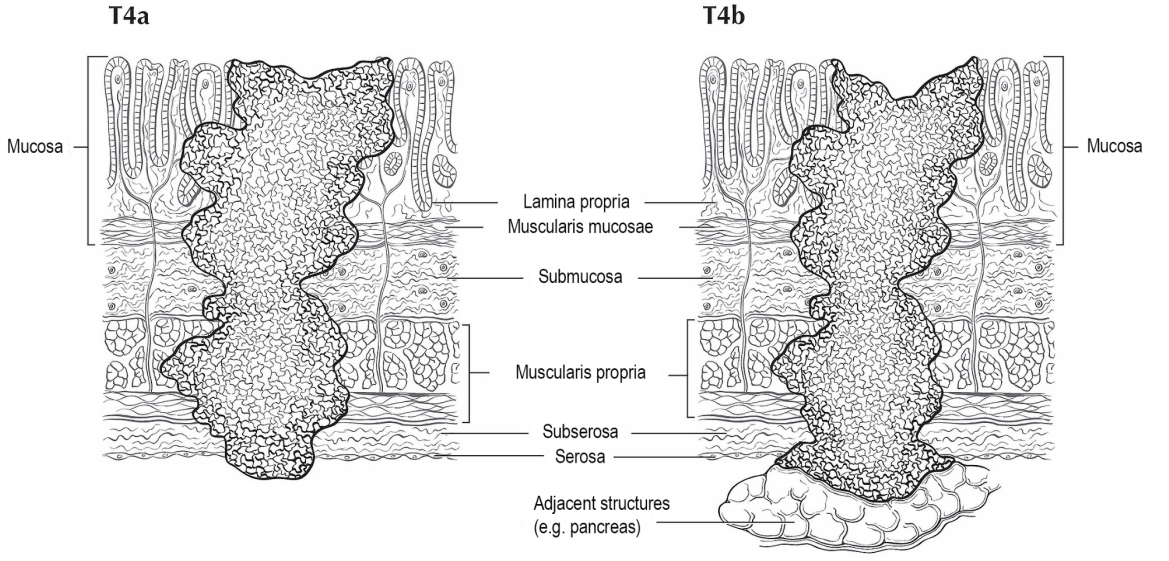


Figure 6: T4a is defined as tumour that penetrates the serosa (visceral peritoneum) without invasion of adjacent structures, whereas T4b is defined as tumour that radially invades adjacent structures, shown here invading the pancreas. Used with permission of the American College of Surgeons, Chicago, Illinois. The original source for this information is the American Joint Committee on Cancer Staging Manual, Eighth Edition (2016) published by Springer Science+Business Media.[2]

References

1 Brierley JD, Gospodarowicz MK and Wittekind C (eds) (2016). *Union for International Cancer Control. TNM Classification of Malignant Tumours, 8th Edition*, Wiley, USA.

2 Amin MB, Edge SB, Greene FL, Byrd DR, Brookland RK, Washington MK, Gershenwald JE, Compton CC, Hess KR, Sullivan DC, Jessup JM, Brierley JD, Gaspar LE, Schilsky RL, Balch CM, Winchester DP, Asare EA, Madera M, Gress DM and Meyer LR (eds) (2017). *AJCC Cancer Staging Manual. 8th Edition*, Springer, New York.