

Maximum tumour dimension (Core)

Reason/Evidentiary Support:

Tumour size has long been recognized as an important prognostic indicator in lung cancer.¹ Based on survival data, the 8th edition of the TNM system has further subdivided the T category by tumour size.^{2,3} The maximum diameter of a tumour, measured to the nearest millimetre, should ideally be assessed on the unfixed specimen to avoid the possibility of size underestimation resulting from formalin fixation-induced shrinkage.⁴ In specimens harbouring multiple synchronous primaries, assignment of the T category is based on the size of the largest tumour.

Care should be taken not to overestimate tumour size by including areas of adjacent obstructive pneumonia in the tumour measurement. The gross assessment of tumour size should be confirmed microscopically and in cases where adjacent obstructive pneumonia has been mistakenly incorporated into the tumour measurement, tumour size should be adjusted accordingly.

References

- 1 Mountain CF, Carr DT and Anderson WA (1974). A system for the clinical staging of lung cancer. *Am J Roentgenol Radium Ther Nucl Med.* 120:130-138.
- 2 Brierley JD, Gospodarowicz MK and Wittekind C (eds) (2016). *UICC TNM Classification of Malignant Tumours, 8th Edition*, Wiley-Blackwell.
- 3 Amin MB, Edge SB and Greene FL et al (eds) (2017). *AJCC Cancer Staging Manual. 8th ed.*, Springer, New York.
- 4 Hsu PK, Huang HC and Hsieh CC et al (2007). Effect of formalin fixation on tumor size determination in stage I non-small cell lung cancer. *Ann Thorac Surg* 84:1825-1829.