

Coding the components of Essential TNM

The components of Essential TNM follow the eighth edition of the full TNM classification (Brierley et al., 2017) and are as follows.

Metastasis (M)

M+ Presence of distant metastasis, clinically or pathologically

M- No mention of distant metastasis

- Distant metastasis (M) means that the original tumour (primary tumour) has spread to distant organs or distant (non-regional) lymph nodes.
- M is based on the best available information, whether clinical information, findings during surgery, images, or pathological information.
- If pathological information is available to inform decisions about involvement by cancer, that is preferred to clinical appraisal of the same tumour location.
- For coding M, clinical signs and findings are enough to justify metastasis (M+) in the absence of pathological confirmation of metastatic deposits.
- Do not code metastasis that is known to have developed after the diagnosis was established.
- If there is no mention of distant metastasis, code as M-.
- If distant metastasis can be established, there is no need to look further in the record for regional

node involvement or tumour size or extension.

Regional lymph node metastasis or involvement (N)

R+ Presence of regional node metastasis or involvement, clinically or pathologically

R2 – Regional node metastasis is advanced

R1 – Regional node metastasis is limited

R- No mention of regional node metastasis

- Involvement of lymph nodes implies that the tumour has spread via the lymphatic system and cancer cells are found in the lymph nodes that drain the specific organ.
- N is based on the most specific data available to confirm the presence or absence of regional node involvement and is generally coded from the pathology report. An “enlarged” or “palpable” node does not constitute involvement on the basis of those words alone.
- N can be coded from the clinical record, typically from imaging or during surgical observation, in the absence of pathological confirmation.
- The definition of regional nodes is cancer site-specific, as can be seen in the figures for each cancer site.

Code as R+ in the presence of documented regional lymph node involvement and as R- otherwise.

- If more detailed information is available and it is relevant for a given cancer site, R+ can be further classified as R2, representing advanced nodal involvement, or R1, representing limited nodal involvement.
- If lymph node involvement (R+) has been established but no further information is available about the number and location of nodes, R+ is assumed. In such a situation, the case will be allotted to the lower stage category (following Rule 4 of the TNM system).

Extent of invasion and/or size of the tumour (T)

A Extent of invasion and/or tumour size is **advanced**

A2 – Extent of invasion and/or tumour size is very advanced

A1 – Extent of invasion and/or tumour size is advanced

L Extent of invasion and/or tumour size is **limited**

L2 – Extent of invasion and/or tumour size is limited

L1 – Extent of invasion and/or tumour size is very limited

X Extent of invasion and/or tumour size cannot be assessed

- T is based on the most specific data available to confirm the extent of invasion within or through the involved organ and/or the size of the primary tumour (depending on the cancer site).
 - T is generally coded from the pathology report or, in the absence of pathological confirmation, from the clinical record (endoscopy, X-rays, palpation, etc.).
 - The results from pathological examination of surgical specimens take precedence over imaging, and imaging takes precedence over cytology or biopsy.
 - The definition of extent of invasion is cancer site-specific.
 - Use the site-specific figures to help code the extent of invasion to the most specific category possible.
- Absence of specific information on metastasis, nodes, and tumour size or extent of invasion**
- Code based on what is known from the record.
 - For M and N, if there is no information on their presence, assume that they are absent (M–, R–).
 - If regional nodes are mentioned but it is not possible to distinguish between advanced and limited metastasis for regional nodes, code as R+.
 - In a similar manner, for T, if it is not possible to distinguish degrees of tumour extension (2 vs 1), code T as simply A or L (depending on the cancer site; see the flow charts).
 - Refer to the specific cancer sites for assessing advanced or limited status.
 - For T, X should be recorded if there is known to be a primary tumour but there is no description of its size or extent of invasion.