



TNM History, Evolution and Milestones

History

The TNM classification of cancer was developed between 1943 and 1952 by Prof. Pierre Denoix at the Institute Gustave-Roussy. The UICC subsequently established a Special Committee on Clinical Stage Classification under the Chairmanship of Dr Denoix. The Committee and its direct descendant, the UICC TNM Prognostic Factors Project, continued to develop the TNM Classification. The pocket book, *Livre de Poche*, first published in 1968, is now in its 8th edition.

At the same time as the UICC was developing the TNM Classification, the International Federation of Gynecology and Obstetrics (FIGO) developed the FIGO Classification for Gynecological malignancies. A little later, the American Joint Committee for Cancer (AJCC) began publishing separate definitions of TNM categories.

In 1987 the UICC and the AJCC TNM classifications were unified.

Currently an agreement between the UICC, AJCC and FIGO ensures compatibility of staging classifications for gynaecological malignancies as well as other cancer.

Evolution of TNM

During the last 50 years advances in diagnosis and treatment and understanding in the prognosis of cancer has resulted in changes in TNM, and prognostic factors other than those that are anatomically based have been identified for various tumour sites. Several are already incorporated into TNM:

1. Histologic grade is incorporated into soft tissue sarcoma, bone and prostate tumours,
2. Age and histology into thyroid tumours
3. Serum markers in testis and gestational trophoblastic tumours.

Currently an increasing number of biologic and genetic prognostic factors are being recognized for many different tumor sites, and this is a rapidly expanding and changing field. For instance, there are increasing data demonstrating that certain genetic mutations are associated with different prognoses and possibly different outcomes to therapy. However, data from early studies are often not confirmed by later studies, and some novel tests, might be difficult to implement in all healthcare systems worldwide. The main method to decide when and what changes should be introduced to the TNM classification is consensus of experts. To bring more evidence to this process, the UICC has developed a mechanism to enhance the procedure for continuous improvement of the TNM classification. This process includes the standardized review of any proposals for changes and the literature watch to identify new knowledge suggesting the need for changes to the TNM system. The site-specific panels of internationally recognized experts have been formed to help with the process.

Milestones in TNM history

1940s	Dr Pierre Denoix developed the TNM Classification of Cancer Stage at the Institut Gustave-Roussy, France. Subsequently, UICC established a Committee on Clinical Stage Classification under his leadership and continued to develop the TNM Classification.
1953	Publication of the "Uniform Technique for a Clinical Classification by the TNM System" ⁱ
1968	UICC TNM pocket book, "the Livre de Poche", 1st edition
1974	UICC Livre de Poche, 2nd edition
1982	UICC TNM Classification, 3rd edition
	In subsequent years
	The International Federation of Gynaecology and Obstetrics (FIGO) developed the FIGO Classification for Gynaecological Malignancies
	The American Joint Committee for Cancer (AJCC) began publishing separate definitions of TNM categories
1982	UICC TNM Atlas, 1st edition, a graphic guide to the TNM Classification
1985	UICC TNM Atlas, 2nd edition
1987	Unification of the UICC and AJCC TNM classifications
	UICC TNM Classification of Malignant Tumours, 4th edition
1989	UICC TNM Atlas, 3rd edition
1993	UICC TNM Supplement, 1st edition, a commentary on uniform use
1995	UICC Prognostic Factors, 1st edition
1997	UICC TNM Classification of Malignant Tumours, 5th edition
	UICC TNM Atlas, 4rd edition
1998	UICC TNM Interactive CD Rom
2001	UICC TNM Supplement, 2nd edition
	UICC Prognostic Factors, 2nd edition
2002	UICC TNM Mobile Edition 2.0
	UICC TNM Classification of Malignant Tumours, 6th edition
2003	UICC TNM Online / Wiley
	UICC TNM Supplement, 3rd edition
2004	UICC TNM Atlas, 5th edition
2006	Prognostic Factors in Cancer, 3rd edition
2009	UICC TNM Classification of Malignant Tumours, 7th edition
2012	UICC TNM Supplement, 4th edition
2014	UICC TNM Atlas, 6th edition
2016	UICC TNM Classification of Malignant Tumours, 8th edition
2019	UICC TNM Supplement, 5th edition
2021	UICC TNM Atlas, 7th edition

ⁱ It was accepted as the basis for the classification proposals for breast and laryngeal cancer by the International Commission on Stage Grouping of Cancer and the Presentation of Results (ICPR).