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Collection of Test Questions on Oncology (TNM Classification, Seventh Edition, 2009)

Study Guide

Recommended by the Academic Council of Sumy State University



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The study guide presents the TNM Classification of Malignant Tumours with Test Questions (Seventh Edition, 2009). The publication is intended for practicing doctors-oncologists, chemotherapists, radiologists, surgeons, as well as for clinical interns, students of medical institutions of higher education.

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Introduction

The History of the TNM System

The TNM System for the classification of malignant tumours was developed by Pierre Denoix (France) between the years 1943 and 1952. In 1950, the UICC appointed a Committee on Tumour Nomenclature and Statistics and adopted, as a basis for its work on clinical stage classification, the general definitions of local extension of malignant tumours suggested by the World Health Organization (WHO) Subcommittee on the Registration of cases of Cancer as well as their Statistical Presentation.

In 1953, the Committee held a joint meeting with the International Commission on Stage-Grouping in Cancer and Presentation of the Results of Treatment of Cancer appointed by the International Congress of Radiology. Agreement was reached on a general technique for classification by anatomical extent of the disease, using the TNM system.

In 1954, the Research Commission of the UICC set up a special Committee on Clinical Stage Classification and Applied Statistics to 'pursue studies in this field and to extend the general technique of classification to cancer at all sites'.

In 1958, the Committee published the first recommendations for the clinical stage classification of cancers of the breast and larynx and for the presentation of results. A second publication in 1959 presented revised proposals for the breast, for clinical use and evaluation over a 5-year period (1960–1964).

Between 1960 and 1967, the Committee published nine brochures describing proposals for the classification of 23 sites. It was recommended that the classification proposals for each site be subjected to prospective or retrospective trial for a 5-year period. In 1968, these brochures were combined in a booklet, the Livre de Poche, and a year later, a complementary booklet was published detailing recommendations for the setting-up of field trials, for the presentation of end results and for the determination and expression of cancer survival rates. The Livre de Poche was subsequently translated into 11 languages.

In 1974 and 1978, second and third editions—were published containing new site classifications and amendments to the previously published classifications. The third edition was enlarged and revised in 1982. It contained new classifications for selected tumours of childhood. This was carried out in collaboration with La Societe Internationale d'Oncologie Pediatrique (SIOP). A classification of ophthalmic tumours was published separately in 1985. Over the years some users introduced variations in the rules of classification of certain sites. In order to correct this development, the antithesis of standardization, the national TNM committees in 1982 agreed to formulate a single TNM. A series of meetings was held to unify and update existing classifications as well as to develop new ones. The result was the fourth edition of TNM.

In 1993, the project published the TNM Supplement. The purpose of this work was to promote the uniform use of TNM by providing detailed explanations of the TNM rules with practical examples. It also included proposals for new classifications and optional expansions of selected categories. Second and third editions appeared in 2001 and 2003.

In 1995, the project published Prognostic Factors in Cancer, a compilation and discussion of prognostic factors in cancer, both anatomic and non-anatomic, at each of the body sites. This was expanded in the second edition in 2001 with emphasis on the relevance of different prognostic factors. The subsequent third edition in 2006 attempted to refine this by providing evidence-based criteria for relevance.

The present seventh edition of TNM Classification contains rules of classification and staging that correspond with those appearing in the seventh edition of the AJCC Cancer Staging Manual (2009) and have approval of all national TNM committees. The UICC recognizes the need for stability in the TNM classification so that data can be accumulated in an orderly way over reasonable periods of time.

Accordingly, it is the intention that the classifications published in this booklet should remain unchanged until some major advances in diagnosis or treatment relevant to a particular site requires reconsideration of the current classification. To develop and sustain a classification system acceptable to all requires the closest liaison between national and international committees. Only in this way will all oncologists be able to use a 'common language' in comparing their clinical material and in assessing the results of treatment. While the classification is based on published evidence, in areas of controversy it is based on international consensus. The continuing objective of the UICC is to achieve common consent in the classification of anatomical extent of disease.

The Principles of the TNM System

The practice of dividing cancer cases into groups according to so-called stages arose from the fact that survival rates were higher for cases in which the disease was localized than for those in which the disease had extended beyond the organ of origin. These groups were often referred to as early cases and late cases, implying some regular progression with time. Actually, the stage of disease at the time of diagnosis may be a reflection not only of the rate of growth and extension of the neoplasm but also of the type of tumour and of the tumour–host relationship.

The anatomical staging of cancer is hallowed by tradition, and for the purpose of analysis of groups of patients it is often necessary to use such a method. The UICC believes that it is important to reach agreement on the recording of accurate information on the anatomical extent of the disease for each site, because the precise clinical description of malignant neoplasms and histopathological classification may serve a number of related objectives, namely:

1) to aid the clinician in the planning of treatment;

- 2) to give some indication of prognosis;
- 3) to assist in evaluation of the results of treatment;
- 4) to facilitate the exchange of information between treatment centres;
- 5) to contribute to the continuing investigation of human cancer;
- 6) to support cancer control activities.

The principal purpose to be served by international agreement on the classification of cancer cases by extent of disease is to provide a method of conveying clinical experience to others without ambiguity.

There are many bases or axes of tumour classification, e. g., the anatomical site and the clinical and pathological extent of disease, the reported duration of symptoms or signs, the gender and age of the patient, and the histological type and grade. All of these bases or axes represent variables that are known to have an influence on the outcome of the disease. Classification by anatomical extent of disease as determined clinically and histopathologically is the one with which the TNM system primarily deals.

The clinician's immediate task is to make a judgement as to prognosis and a decision as to the most effective course of treatment. This judgement and this decision require, among other things, an objective assessment of the anatomical extent of the disease. In accomplishing this, the trend is away from 'staging' to meaningful description, with or without some form of summarization. To meet the stated objectives a system of classification is needed:

- 1) whose basic principles are applicable to all sites regardless of treatment; and
- 2) which may be supplemented later by information that becomes available from histopathology and/or surgery.

The General Rules of the TNM System

The TNM system for describing the anatomical extent of disease is based on the assessment of three components:

- T the extent of the primary tumour;
- N the absence or presence and extent of regional lymph node metastasis;
- M the absence or presence of distant metastasis.

The addition of numbers to these three components indicates the extent of the malignant disease, thus: T0, T1, T2, T3, T4; N0, N1, N2, N3; M0, M1.

In effect the system is a 'shorthand notation' for describing the extent of a particular malignant tumour. The general rules applicable to all sites are as follows:

- 1. All cases should be confirmed microscopically. Any cases not so proved must be reported separately.
 - 2. Two classifications are described for each site, namely:

- (a) Clinical classification: the pretreatment clinical classification designated TNM (or cTNM) is essential to select and evaluate therapy. This is based on evidence acquired before treatment. Such evidence arises from physical examination, imaging, endoscopy, biopsy, surgical exploration, and other relevant examinations.
- (b) Pathological classification: the postsurgical histopathological classification, designated pTNM, is used to guide adjuvant therapy and provides additional data to estimate prognosis and calculate end results. This is based on evidence acquired before treatment, supplemented or modified by additional evidence acquired from surgery and from pathological examination. The pathological assessment of the primary tumour (pT) entails a resection of the primary tumour or biopsy adequate to evaluate the highest pT category. The pathological assessment of the regional lymph nodes (pN) entails removal of the lymph nodes adequate to validate the absence of regional lymph node metastasis (pN0) or sufficient to evaluate the highest pN category. An excisional biopsy of a lymph node without pathological assessment of the primary is insufficient to fully evaluate the pN category and is a clinical classification. The pathological assessment of distant metastasis (pM) entails microscopic examination.
- 3. After assigning T, N, and M and/or pT, pN, and pM categories, these may be grouped into stages. The TNM classification and stage groups, once established, must remain unchanged in the medical records. Clinical and pathological data may be combined when only partial information is available either in the pathological classification or the clinical classification.
- 4. If there is doubt concerning the correct T, N, or M category to which a particular case should be allotted, then the lower (i. e., less advanced) category should be chosen. This will also be reflected in the stage grouping.
- 5. In the case of multiple primary tumours in one organ, the tumour with the highest T category should be classified and the multiplicity or the number of tumours should be indicated in parenthesis, e. g., T2(m) or T2(5). In simultaneous bilateral primary cancers of paired organs, each tumour should be classified independently. In tumours of the liver, ovary, and fallopian tube, multiplicity is a criterion of T classification, and in tumours of the lung multiplicity may be a criterion of T or M classification.
- 6. Definitions of TNM categories and stage grouping may be telescoped or expanded for clinical or research purposes as long as the basic definitions recommended are not changed. For instance, any T, N, or M can be divided into subgroups.

TNM Clinical Classification

The following general definitions are used throughout:

T – Primary Tumour:

TX – primary tumour cannot be assessed;

T0 – no evidence of primary tumour;

Tis – carcinoma in situ;

T1–T4 – increasing size and/or local extent of the primary tumour.

N – Regional Lymph Nodes:

NX – regional lymph nodes cannot be assessed;

N0 – no regional lymph node metastasis;

N1–N3 – increasing involvement of regional lymph nodes.

M – Distant Metastasis*:

M0 – no distant metastasis;

M1 – distant metastasis.

Note. *The MX category is considered to be inappropriate as clinical assessment of metastasis can be based on physical examination alone. (The use of MX may result in exclusion from staging.)

pTNM Pathological Classification

The following general definitions are used throughout:

pT – Primary Tumour:

pTX – primary tumour cannot be assessed histologically;

pT0 – no histological evidence of primary tumour;

pTis – carcinoma in situ;

pT1–4 – increasing size and/or local extent of the primary tumour histologically.

pN – Regional Lymph Nodes:

pNX – regional lymph nodes cannot be assessed histologically;

pN0 – no regional lymph node metastasis histologically;

pN1–3 – increasing involvement of regional lymph nodes histologically;

Notes:

- 1. Direct extension of the primary tumour into lymph nodes is classified as lymph node metastasis.
- 2. Tumour deposits (satellites), i. e., macro- or microscopic nests or nodules, in the lymph drainage area of a primary carcinoma without histological evidence of residual lymph node in the nodule, may represent discontinuous spread, venous invasion (V1/2) or a totally replaced lymph node. If a nodule is considered by the pathologist to be a totally replaced lymph node (generally having a smooth contour), it should be recorded as a positive lymph node, and each such nodule should be counted separately as a lymph node in the final pN determination.
 - 3. Metastasis in any lymph node other than regional is classified as a distant metastasis.

- 4. When size is a criterion for pN classification, measurement is made of the metastasis, not of the entire lymph node.
- 5. Cases with micrometastasis only, i. e., no metastasis larger than 0.2 cm, can be identified by the addition of '(mi)', e. g., pN1(mi).
 - 6. The number of resected and positive nodes should be recorded.

Histopathological Grading

In most sites further information regarding the primary tumour may be recorded under the following heading:

- G Histopathological Grading:
- GX grade of differentiation cannot be assessed;
- G1 well differentiated;
- G2 moderately differentiated;
- G3 poorly differentiated;
- G4 undifferentiated.

Note. Grades 3 and 4 can be combined in some circumstances as 'G3-4, poorly differentiated or undifferentiated'

The bone and soft tissue sarcoma classifications also use 'high grade' and 'low grade'. Special systems of grading are recommended for tumours of breast, corpus uteri, prostate, and liver.

Stage Grouping

The TNM system is used to describe and record the anatomical extent of disease. For purposes of tabulation and analysis it is useful to condense these categories into stage groups. For consistency, in the TNM system, carcinoma in situ is categorized Stage 0; in general, tumours localized to the organ of origin as Stages I and II, locally extensive spread, particularly to regional lymph nodes as Stage III, and those with distant metastasis as Stage IV. The stage adopted is such as to ensure, as far as possible, that each group is more or less homogeneous in respect of survival, and that the survival rates of these groups for each cancer site are distinctive.

For pathological stage groups, if sufficient tissue has been removed for pathological examination to evaluate the highest T and N categories, M1 may be either clinical (cM1) or pathological (pM1). However, if only a distant metastasis has had microscopic confirmation, the classification is pathological (pM1) and the stage is pathological.

Although the anatomical extent of disease, as categorized by TNM, is a very powerful prognostic indicator in cancer, it is recognized that many factors have a significant impact on predicting outcomes. Some have been incorporated into stage grouping, as has grade in soft tissue sarcoma and age in thyroid cancer. These classifications will be unchanged in this edition. In the newly revised classifications for oesophagus and prostate carcinomas, stage grouping has been

maintained as defining the anatomical extent of disease and new prognostic groupings that incorporate other prognostic factors have been proposed.

Lip and oral cavity

Regional Lymph Nodes

The regional lymph nodes are the cervical nodes.

TNM Clinical Classification

T – Primary Tumour:

TX – primary tumour cannot be assessed;

T0 – no evidence of primary tumour;

Tis – carcinoma in situ;

T1 – tumour 2 cm or less in greatest dimension;

T2 – tumour more than 2 cm but not more than 4 cm in greatest dimension;

T3 – tumour more than 4 cm in greatest dimension;

T4a (lip) – tumour invades through cortical bone, inferior alveolar nerve, floor of mouth, or skin (chin or nose);

T4a (oral cavity) – tumour invades through cortical bone, into deep/extrinsic muscle of tongue (genioglossus, hyoglossus, palatoglossus, and styloglossus), maxillary sinus, or skin of face;

T4b (lip and oral cavity) – tumour invades masticator space, pterygoid plates, or skull base, or encases internal carotid artery.

Note. Superficial erosion alone of bone/tooth socket by gingival primary is not sufficient to classify a tumour as T4

N – Regional Lymph Nodes:

NX – regional lymph nodes cannot be assessed;

N0 – no regional lymph node metastasis;

N1 – metastasis in a single ipsilateral lymph node, 3 cm or less in greatest dimension;

N2 – metastasis as described below:

N2a – metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension;

N2b – metastasis in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension;

N2c – metastasis in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension;

N3 – metastasis in a lymph node more than 6 cm in greatest dimension.

Note. Midline nodes are considered ipsilateral nodes

M – Distant Metastasis:

M0 – no distant metastasis;

M1 – distant metastasis.

Table 1 – Stage Grouping

Stage 0	Tis	N0	M0
Stage I	T1	N0	M0
Stage II	T2	N0	M0
Stage III	Т3	N0	M0
	T1, T2, T3	N1	M0
Stage IVA	T4a	N0, N1	M0
	T1, T2, T3, T4a	N2	M0
Stage IVB	Any T	N3	M0
	T4b	Any N	M0
Stage IVC	Any T	Any N	M1

Tests

- 1. Signs and symptoms of mouth cancer may include:
- A. A sore that doesn't heal.
- B. A lump or thickening of the skin or lining of mouth.
- C. A white or reddish patch on the inside of mouth.
- D. All of the above.

Correct answer: D.

- 2. Signs and symptoms of mouth cancer may include the following, except:
- A. Loose teeth, poorly fitting dentures.
- B. Tongue pain, jaw pain or stiffness.
- C. Nausea and vomiting.
- D. Difficult or painful swallowing.

Correct answer: C.

- 3. Most oral cancers are:
- A. Adenocarcinoma.
- B. Lymphoma.
- C. Leiomyosarcoma.
- D. Squamous cell carcinoma.

- 4. Factors that can increase the risk of mouth cancer include:
- A. Tobacco use of any kind, including cigarettes, cigars, pipes, chewing tobacco and snuff, among others.
- B. Heavy alcohol use, excessive sun exposure to your lips.
- C. A sexually transmitted virus called human papillomavirus (HPV).
- D. All of the above.

- 5. Surgery for mouth cancer may include:
- A. Surgery to remove the tumour.
- B. Surgery to remove cancer that has spread to the neck.
- C. Surgery to reconstruct the mouth.
- D. All of the above.

Correct answer: D.

- 6. The side effects of radiation therapy may include the following, except:
- A. Dry mouth, tooth decay.
- B. Jaw stiffness, fatigue and red, burn-like skin reactions.
- C. Heart damage, lung damage, fertility problems.
- D. Mouth sores, bleeding gums.

Correct answer: C.

- 7. What is the targeted drug use for blocking chemicals that stop the action of a protein that's found in many types of healthy cells, but is more prevalent in certain types of cancer cells?
- A. Trastuzumab (Herceptin).
- B. Lapatinib (Tykerb).
- C. Cetuximab.
- D. Bevacizumab (Avastin).

Correct answer: C.

- 8. What is T1 of lip cancer?
- A. Tumour 2 cm or less in greatest dimension.
- B. Tumour more than 2 cm but not more than 4 cm in greatest dimension.
- C. Tumour more than 4 cm in greatest dimension.
- D. Tumour invades through cortical bone, inferior alveolar nerve, floor of mouth, or skin (chin or nose).

Correct answer: A.

9. What is T2 of lip cancer?

- A. Tumour 2 cm or less in greatest dimension.
- B. Tumour more than 2 cm but not more than 4 cm in greatest dimension.
- C. Tumour more than 4 cm in greatest dimension.
- D. Tumour invades through cortical bone, inferior alveolar nerve, floor of mouth, or skin (chin or nose).

- 10. What is T3 of lip cancer?
- A. Tumour 2 cm or less in greatest dimension.
- B. Tumour more than 2 cm but not more than 4 cm in greatest dimension.
- C. Tumour more than 4 cm in greatest dimension.
- D. Tumour invades through cortical bone, inferior alveolar nerve, floor of mouth, or skin (chin or nose).

Correct answer: C.

- 11. Lip cancer can occur anywhere along the upper or lower lip, but is most common on the:
- A. Lower lip.
- B. Upper lip.

Correct answer: A.

- 12. Tests and procedures used to diagnose mouth cancer include:
- A. Removal of tissue for testing.
- B. Using a scope to inspect your throat.
- C. Imaging tests.
- D. All of the above.

Correct answer: D.

- 13. There are several types of oral cancers, but around 90 % are:
- A. Squamous cell carcinomas.
- B. Adenocarcinomas.
- C. Lymphomas.
- D. Teratomas.

- 14. Mouth cancer may occur on the:
- A. Floor of the mouth, lips.
- B. Cheek lining.
- C. Gingiva (gums), palate.
- D. All of the above.

Correct answer: D.
15. Symptoms that may be associated with mouth cancer are the following, except:
A. Tongue problems (moving it).
B. Bone pain.
C. Swallowing difficulty.
D. Mouth sores.
Correct answer: B.
16. What are the causes of mouth cancer?
A. Excessive alcohol consumption.
B. Smoking.
C. Poor oral hygiene.
D. All of the above.
Correct answer: D.
17. Men are affected twice as often as women. Is it true?
A. Yes.
B. No.
Correct answer: A.
18. There are several different types of premalignant lesion that occur in the mouth, such as:
A. Leukoplakia.
B. Erythroplakia.
C. Erythroleukoplakia.
D. All of the above.
Correct answer: D.
19. What is the type of human papillomavirus (HPV) that can cause the mouth cancer?
A. 18.
B. 16.
C. 31.
D. 58.

B. Mandibulectomy (removal of the mandible or lower jaw or part of it).

A. Maxillectomy (can be done with or without orbital exenteration).

C. Glossectomy.

Correct answer: B.

20. Surgeries for oral cancers include:

D. All of the above.

Correct answer: D.

- 21. The most common symptoms of oral cancer include the following, except:
- A. Swellings/thickenings, lumps or bumps, rough spots/crusts/or eroded areas on the lips, gums, or other areas inside the mouth.
- B. The development of velvety white, red, or speckled (white and red) patches in the mouth oral cancer.
- C. Back pain.
- D. Unexplained bleeding in the mouth.

Correct answer: C.

- 22. The most common symptoms of oral cancer include the following, except:
- A. A soreness or feeling that something is caught in the back of the throat.
- B. Vomiting.
- C. Difficulty chewing or swallowing, speaking, or moving the jaw or tongue.
- D. Hoarseness, chronic sore throat, or change in voice.

Correct answer: B.

- 23. Risk factors for the development of oral cancer include the following, except:
- A. Female sex.
- B. Family history of cancer.
- C. Excessive sun exposure, especially at a young age.
- D. Human papillomavirus (HPV).

Correct answer: A.

- 24. Risk factors for the development of oral cancer include:
- A. Smoking.
- B. Smokeless tobacco users.
- C. Excessive consumption of alcohol.
- D. All of the above.

- 25. The overall 1-year survival rate for patients with all stages of oral cavity and pharynx cancers is:
- A. 61 %.
- B. 71 %.
- C. 81 %.
- D. 91 %.

Correct answer: C.
26. The overall 5-year survival rate for patients with all stages of oral cavity and pharynx cancers is:
A. 46 %.
B. 56 %.
C. 66 %.
D. 76 %.
Correct answer: B.
27. To prevent oral cancer:
A. Don't smoke or use any tobacco products and drink alcohol in moderation (and refrain from
binge drinking)
B. Eat a well balanced diet.
C. Limit your exposure to the sun.
D. All of the above.
Correct answer: D.
28. How is oral cancer treated?
A. Surgery.
B. Radiation therapy.
C. Chemotherapy.
D. All of the above.
Correct answer: D.
29. The overall 1-year survival rate for patients with all stages of oral cavity and pharynx cancers is:
A. 31 %.
B. 41 %.
C. 51 %.
D. 61 %.
Correct answer: B.
30. Oral cancers are about ten times more common in drinkers than in nondrinkers. Is it true?
A. Yes.

B. No.

Thyroid Gland

Regional Lymph Nodes

The regional lymph nodes are the cervical and upper/superior mediastinal nodes.

TNM Clinical Classification

T – Primary Tumour:

- TX primary tumour cannot be assessed;
- T0 no evidence of primary tumour;
- T1 tumour 2 cm or less in greatest dimension, limited to the thyroid;
- T1a tumour 1 cm or less in greatest dimension, limited to the thyroid;
- T1b tumour more than 1 cm but not more than 2 cm in greatest dimension, limited to the thyroid;
- T2 tumour more than 2 cm but not more than 4 cm in greatest dimension, limited to the thyroid;
- T3 tumour more than 4 cm in greatest dimension, limited to the thyroid or any tumour with minimal extrathyroid extension (e.g., extension to sternothyroid muscle or perithyroid soft tissues):
- T4a tumour extends beyond the thyroid capsule and invades any of the following: subcutaneous soft tissues, larynx, trachea, oesophagus, recurrent laryngeal nerve;
 - T4b tumour invades prevertebral fascia, mediastinal vessels, or encases carotid artery.
 - All anaplastic carcinomas are considered T4 tumours:
 - T4a* (anaplastic carcinoma only) tumour (any size) limited to the thyroid;
 - T4b* (anaplastic carcinoma only) tumour (any size) extends beyond the thyroid capsules.
- Note. Multifocal tumours of all histological types should be designated (m) (the largest determines the classification), e. g., T2(m)

N – Regional Lymph Nodes:

- NX regional lymph nodes cannot be assessed;
- N0 no regional lymph node metastasis;
- N1 regional lymph node metastasis;
- N1a metastasis in Level VI (pretracheal, paratracheal, and prelaryngeal/Delphian lymph nodes);
- N1b metastasis in other unilateral, bilateral or contralateral cervical (Levels I, II II, IV, or V) or retropharyngeal or superior mediastinal lymph nodes.

M – Distant Metastasis:

M0 – no distant metastasis;

Table 2 – Stage Grouping. Separate stage groupings recommended for papillary and follicular (differentiated), medullary, and anaplastic (undifferentiated) carcinomas

	Papillary or Fol	licular Under 45 years	
Stage I	Any T	Any N	M0
Stage II	Any T	Any N	M1
	Papillary or Folli	cular 45 years and older	
Stage I	T1a, T1b	N0	M0
Stage II	T2	N0	M0
Stage III	T3	N0	M0
	T1, T2, T3	N1a	M0
Stage IVA	T1, T2, T3	N1b	M0
	T4a	N0, N1	M0
Stage IVB	T4b	Any N	M0
Stage IVC	Any T	Any N	M1
	M	edullary	
Stage I	T1a, T1b	N0	M0
Stage II	T2, T3	N0	M0
Stage III	T1, T2, T3	N1a	M0
Stage IVA	T1, T2, T3	N1b	M0
	T4a	Any N	M0
Stage IVB	T4b	Any N	M0
Stage IVC	Any T	Any N	M1

Tests

- 1. The thyroid gland contains mainly 2 types of cells (two answers):
- A. Thyroid cells.
- B. Follicular cells.
- C. Parafollicular cells.
- D. All of the above.

Correct answers: B, C.

- 2. What are the different types of thyroid cancer?
- A. Papillary carcinoma.
- B. Follicular carcinoma.
- C. Hürthle cell carcinoma.
- D. All of the above.

- 3. Anaplastic carcinoma is also called:
- A. Undifferentiated carcinoma.

- B. Thyroid lymphoma.
- C. Thyroid sarcoma.
- D. All of the above.

- 4. How many parathyroid glands do people have?
- A. 2.
- B. 4.
- C. 6.
- D. 8.

Correct answer: B.

- 5. What are the risk factors for thyroid cancer?
- A. Gender and age.
- B. Diet low in Iodine.
- C. Radiation.
- D. All of the above.

Correct answer: D.

- 6. Can thyroid cancer be found early?
- A. Yes.
- B. No.

Correct answer: A.

- 7. Thyroid cancer can cause any of the following local signs or symptoms, except:
- A. Nausea.
- B. A lump or swelling in the neck, sometimes growing rapidly.
- C. A pain in the front of the neck, sometimes going up to the ears.
- D. Hoarseness or other voice change that does not go away.

Correct answer: A.

- 8. Thyroid cancer can cause any of the following local signs or symptoms:
- A. Trouble swallowing.
- B. Breathing problems (feeling as if one were breathing through a straw).
- C. A cough that continues and is not due to a cold.
- D. All of the above.

Correct answer: A.

- 9. How is thyroid cancer treated?
- A. Lobectomy.
- B. Thyroidectomy.
- C. Lymph node removal.
- D. All of the above.

Correct answer: D.

- 10. Can thyroid cancer be prevented?
- A. Yes.
- B. No.
- C. Not always.

Correct answer: C.

11. Parafollicular cells produce the hormone:

- A. Calcitonin.
- B. T3.
- C. T4.
- D. All of the above.

- 12. What is five-year survival rate for patients with thyroid cancer?
- A. 97 %.
- B. 77 %.
- C. 57 %.
- D. 37 %.

Correct answer: A.

- 13. Most often the first symptom of thyroid cancer is:
- A. Trouble swallowing.
- B. A nodule in the thyroid region of the neck.
- C. A pain in the front of the neck, sometimes going up to the ears.
- D. Hoarseness or other voice change that does not go away.

Correct answer: B.

- 14. The main causes of thyroid cancer are:
- A. Exposure to ionizing radiation.
- B. Exposure to iodine-131.
- C. Genetic factors.
- D. All of the above.

Correct answer: A.

- 15. Measurement of calcitonin is necessary to exclude the presence of:
- A. Papillary carcinoma.
- B. Follicular carcinoma.
- C. Medullary thyroid cancer.
- D. All of the above.

Correct answer: C.

- 16. What is the most common type of thyroid cancer?
- A. Papillary carcinoma.
- B. Follicular carcinoma.
- C. Medullary thyroid cancer.
- D. Undifferentiated carcinoma.

Correct answer: A.

- 17. What is the least common type of thyroid cancer?
- A. Papillary carcinoma.
- B. Follicular carcinoma.
- C. Medullary thyroid cancer.
- D. Undifferentiated carcinoma.

- 18. What is the type of thyroid cancer not responsive to treatment and can cause pressure symptoms?
- A. Papillary carcinoma.

- B. Follicular carcinoma.
- C. Medullary thyroid cancer.
- D. Undifferentiated carcinoma.

- 19. Thyroid cancer is three times more common in women than in men. Is it true?
- A. Yes.
- B. No.

Correct answer: A

- 20. Papillary thyroid cancer can occur at any age, but most often it affects people aged:
- A. 20–30.
- B. 30-50.
- C. 50-70.
- D. 70-80.

Correct answer: B.

- 21. Follicular thyroid cancer can occur at any age, but most often it affects people aged:
- A. 20-30.
- B. 30-50.
- C. 50-70.
- D. 70-80.

Correct answer: C.

- 22. Elevated levels of calcitonin in the blood can detect:
- A. Papillary carcinoma.
- B. Follicular carcinoma.
- C. Medullary thyroid cancer.
- D. Undifferentiated carcinoma.

Correct answer: C.

- 23. Factors that may increase the risk of thyroid cancer include:
- A. Female sex.
- B. Exposure to high levels of radiation.
- C. Certain inherited genetic syndromes.
- D. All of the above.

Correct answer: D.

- 24. Genetic syndromes that increase the risk of thyroid cancer include:
- A. Familial medullary thyroid cancer.
- B. Multiple endocrine neoplasia.
- C. Familial adenomatous polyposis.
- D. All of the above.

Correct answer: D.

- 25. Tests and procedures used to diagnose thyroid cancer include:
- A. Removing a sample of thyroid tissue.
- B. Imaging tests.
- C. Physical exam.
- D. All of the above.

- 26. Operations used to treat thyroid cancer include:
- A. Removing all or most of the thyroid (thyroidectomy).
- B. Removing lymph nodes in the neck.
- C. Removing a portion of the thyroid (thyroid lobectomy).
- D. All of the above.

- 27. Side effects of radioactive iodine may include the following, except:
- A. Nausea.
- B. Dry mouth, dry eyes.
- C. Altered sense of taste or smell.
- D. Bone pain.

Correct answer: D.

- 28. Targeted drugs used to treat thyroid cancer include the following, except:
- A. Cabozantinib (Cometriq).
- B. Sorafenib (Nexavar).
- C. Vandetanib (Caprelsa).
- D. Trastuzumab (Herceptin).

Correct answer: D.

- 29. Thyroid gland produces hormones that regulate the following, except:
- A. Heart rate.
- B. Blood pressure.
- C. Colour of the skin.
- D. Body temperature.

Correct answer: C.

- 30. The prognosis of thyroid cancer is related to the type of cancer and the stage at the time of diagnosis. Is it true?
- A. Yes.
- B. No.

Correct answer: A.

Esophagus

Regional Lymph Nodes

The regional lymph nodes, irrespective of the site of the primary tumour, are those in the esophageal drainage area including coeliac axis nodes and paraesophageal nodes in the neck, but not supraclavicular nodes.

TNM Clinical Classification

T – Primary Tumour:

TX – primary tumour cannot be assessed;

T0 – no evidence of primary tumour;

Tis – carcinoma in situ/high-grade dysplasia;

T1 – tumour invades lamina propria, muscularis mucosae, or submucosa;

T1a – tumour invades lamina propria or muscularis mucosae;

T1b – tumour invades submucosa;

T2 – tumour invades muscularis propria;

T3 – tumour invades adventitia;

T4 – tumour invades adjacent structures;

T4a – tumour invades pleura, pericardium, or diaphragm;

T4b – tumour invades other adjacent structures such as aorta, vertebral body, or trachea.

N – Regional Lymph Nodes:

NX – regional lymph nodes cannot be assessed;

N0 – no regional lymph node metastasis;

N1 – metastasis in 1–2 regional lymph nodes;

N2 – metastasis in 3–6 regional lymph nodes;

N3 – metastasis in 7 or more regional lymph nodes.

M – Distant Metastasis:

M0 – no distant metastasis;

M1 – distant metastasis.

Table 3 – Stage Grouping. Carcinomas of the esophagus and esophagogastric junction

	_	1 0 1 0	
Stage 0	Tis	N0	M0
Stage IA	T1	N0	M0
Stage IB	T2	N0	M0
Stage IIA	Т3	N0	M0
Stage IIB	T1, T2	N1	M0
Stage IIIA	T4a	N0	M0
	Т3	N1	M0
	T1, T2	N2	M0
Stage IIIB	Т3	N2	M0
Stage IIIC	T4a	N1, N2	M0
	T4b	Any N	M0
	Any T	N3	M0
Stage IV	Any T	Any N	M1

Tests

- 1. There are two types of esophageal cancer (two answers):
- A. Squamous cell carcinoma.
- B. Adenocarcinoma.
- C. Papillary carcinoma.
- D. Follicular carcinoma.

Correct answers: A, B.

2. What are the symptoms of esophageal cancer?

A. Mild or intermittent difficulty swallowing (sometimes called dysphagia), pain while swallowing (also known as odynophagia), or a foreign body sensation.

- B. Heartburn.
- C. Chest pain.
- D. All of the above.

Correct answer: D.

- 3. What are the symptoms of esophageal cancer?
- A. A pain in the front of the neck, sometimes going up to the ears.
- B. Dyspepsia (indigestion).
- C. Occult blood in the stool (undetectable to the eye but visible through tests or a microscope).
- D. All of the above.

Correct answer: D.

- 4. Symptoms of advanced esophageal carcinoma become apparent with tumor growth. The most common symptoms include the following, except:
- A. Increasing difficulty swallowing.
- B. Dyspepsia (indigestion).
- C. Weight loss and anorexia (due to difficulty swallowing or pain when swallowing).
- D. Iron-deficiency anaemia.

Correct answer: B.

- 5. What are the risk factors of esophageal cancer?
- A. Alcohol intake.
- B. Cigarette smoking.
- C. Excessive weight (obesity).
- D. All of the above.

Correct answer: D.

- 6. Are all stages of esophageal cancer treated with surgery?
- A. Yes.
- B. No.

- 7. What type of post-surgery care will a patient need?
- A. Help with learning to swallow.
- B. Deal with a feed tube during recovery.
- C. Deal with a stent, which may be placed in the esophagus during surgery.
- D. All of the above.

- 8. How much recovery time is needed after surgery?
- A. 3 to 5 days.
- B. 5 to 10 days.
- C. 10 to 20 days.
- D. 20 to 30 days.

Correct answer: C.

- 9. What is pre-cancerous condition for esophageal cancer?
- A. Barrett's esophagus.
- B. Acute esophagitis.
- C. Chronic esophagitis.
- D. All of the above.

Correct answer: A.

- 10. This procedure may be used after the cancer is diagnosed to see how locally advanced the cancer is or if it has spread to areas near the esophagus or to distant sites:
- A. CT scan, or computed tomography.
- B. Endoscopic ultrasonography (EUS).
- C. Fecal occult blood test.
- D. Barium swallow X-ray, or esophogram.

Correct answer: A.

- 11. This type of esophageal cancer starts in squamous cells that line the esophagus. It usually develops in the upper and middle part of the esophagus.
- A. Squamous cell carcinoma.
- B. Adenocarcinoma.
- C. Papillary carcinoma.
- D. Follicular carcinoma.

12. This type begins in the glandular tissue in the lower part of the esophagus where the esophagus
and the stomach come together.
A. Squamous cell carcinoma.
B. Adenocarcinoma.
C. Papillary carcinoma.
D. Follicular carcinoma.
Correct answer: B.
13. The 5-year survival rate for people with esophageal cancer is:
A. 18 %.
B. 28 %.
C. 38 %.
D. 48 %.
Correct answer: A.
14. The 5-year survival rate of people with cancer located only in the esophagus is:
A. 20 %.
B. 40 %.
C. 50 %.
D. 60 %.
Correct answer: B.
15. The 5-year survival rate for those with disease that has spread to surrounding tissues or organs
and/or the regional lymph nodes is:
A. 12 %.
B. 22 %.
C. 32 %.
D. 42 %.
Correct answer: B.
16. If esophageal cancer has spread to distant parts of the body, the survival rate is:
A. 4 %.
B. 14 %.
C. 24 %.
D. 34 %.
Correct answer: A.
17. The following factors may raise a person's risk of developing esophageal cancer:
A. Tobacco.

- B. Alcohol.
- C. Barrett's esophagus.
- D. All of the above.

- 18. The risk factors of esophageal cancer are the following, except:
- A. Achalasia.
- B. Human papillomavirus (HPV).
- C. Young age.
- D. Obesity.

Correct answer: C.

- 19. Men are 3 to 4 times more likely than women to develop esophageal cancer. Is it true?
- A. Yes.
- B. No.

Correct answer: A.

- 20. Black people are twice as likely as white people to develop the squamous cell type of esophageal cancer. Is it true?
- A. Yes.
- B. No.

Correct answer: A.

- 21. What is T1 of esophageal cancer?
- A. There is a tumour in the lamina propria and 2 inside layers of the esophagus called the submucosa. Cancer cells have spread into the lining of the esophagus.
- B. The tumour is in the third layer of the esophagus called the muscularis propria. Cancer cells have spread into but not through the muscle wall of the esophagus.
- C. The tumour is in the outer layer of the esophagus called the adventitia. Cancer cells have spread through the entire muscle wall of the esophagus into surrounding tissue.
- D. The tumour has spread outside the esophagus into areas around it. Cancer cells have spread to structures surrounding the esophagus, including the large blood vessel coming from the heart called the aorta, the windpipe, diaphragm, and the pleural lining of the lung.

- 22. What is T2 of esophageal cancer?
- A. There is a tumour in the lamina propria and 2 inside layers of the esophagus called the submucosa. Cancer cells have spread into the lining of the esophagus.

- B. The tumour is in the third layer of the esophagus called the muscularis propria. Cancer cells have spread into but not through the muscle wall of the esophagus.
- C. The tumour is in the outer layer of the esophagus called the adventitia. Cancer cells have spread through the entire muscle wall of the esophagus into surrounding tissue.
- D. The tumour has spread outside the esophagus into areas around it. Cancer cells have spread to structures surrounding the esophagus, including the large blood vessel coming from the heart called the aorta, the windpipe, diaphragm, and the pleural lining of the lung.

- 23. What is T3 of esophageal cancer?
- A. There is a tumour in the lamina propria and 2 inside layers of the esophagus called the submucosa. Cancer cells have spread into the lining of the esophagus.
- B. The tumour is in the third layer of the esophagus called the muscularis propria. Cancer cells have spread into but not through the muscle wall of the esophagus.
- C. The tumour is in the outer layer of the esophagus called the adventitia. Cancer cells have spread through the entire muscle wall of the esophagus into surrounding tissue.
- D. The tumour has spread outside the esophagus into areas around it. Cancer cells have spread to structures surrounding the esophagus, including the large blood vessel coming from the heart called the aorta, the windpipe, diaphragm, and the pleural lining of the lung.

Correct answer: C.

- 24. What is T4 of esophageal cancer?
- A. There is a tumour in the lamina propria and 2 inside layers of the esophagus called the submucosa. Cancer cells have spread into the lining of the esophagus.
- B. The tumour is in the third layer of the esophagus called the muscularis propria. Cancer cells have spread into but not through the muscle wall of the esophagus.
- C. The tumour is in the outer layer of the esophagus called the adventitia. Cancer cells have spread through the entire muscle wall of the esophagus into surrounding tissue.
- D. The tumour has spread outside the esophagus into areas around it. Cancer cells have spread to structures surrounding the esophagus, including the large blood vessel coming from the heart called the aorta, the windpipe, diaphragm, and the pleural lining of the lung.

- 25. What is G1 of esophageal cancer?
- A. The tissue looks more like healthy cells, called 'well differentiated'.
- B. The cells are somewhat different than healthy cells, called 'somewhat differentiated'.
- C. The tumor cells barely look like healthy cells, called 'poorly differentiated'.

- D. The cancer cells look almost alike and do not look like healthy cells, called 'not differentiated'.
- Correct answer: A.
- 26. What is G2 of esophageal cancer?
- A. The tissue looks more like healthy cells, called 'well differentiated'.
- B. The cells are somewhat different than healthy cells, called 'somewhat differentiated'.
- C. The tumor cells barely look like healthy cells, called 'poorly differentiated'.
- D. The cancer cells look almost alike and do not look like healthy cells, called 'not differentiated'.
- Correct answer: B.
- 27. What is G3 of esophageal cancer?
- A. The tissue looks more like healthy cells, called 'well differentiated'.
- B. The cells are somewhat different than healthy cells, called 'somewhat differentiated'.
- C. The tumor cells barely look like healthy cells, called 'poorly differentiated'.
- D. The cancer cells look almost alike and do not look like healthy cells, called 'not differentiated'.
- Correct answer: C.
- 28. What is G4 of esophageal cancer?
- A. The tissue looks more like healthy cells, called 'well differentiated'.
- B. The cells are somewhat different than healthy cells, called 'somewhat differentiated'.
- C. The tumor cells barely look like healthy cells, called 'poorly differentiated'.
- D. The cancer cells look almost alike and do not look like healthy cells, called 'not differentiated'.
- Correct answer: D.
- 29. What tests may be used to diagnose esophageal cancer?
- A. Barium swallow, also called an esophagram.
- B. Upper endoscopy, also called esophagus-gastric-duodenoscopy.
- C. Biopsy.
- D. All of the above.
- Correct answer: D.
- 30. People between the ages of 45 and 70 have the highest risk of esophageal cancer. Is it true?
- A. Yes.
- B. No.
- Correct answer: A.

Stomach

Regional Lymph Nodes

The regional lymph nodes of the stomach are the perigastric nodes along the lesser and greater curvatures, the nodes along the left gastric, common hepatic, splenic, and coeliac arteries,

and the hepatoduodenal nodes. Involvement of other intra-abdominal lymph nodes such as retropancreatic, mesenteric, and para-aortic is classified as distant metastasis.

TNM Clinical Classification

T – Primary Tumour:

- TX primary tumour cannot be assessed;
- T0 no evidence of primary tumour;
- Tis carcinoma in situ: intraepithelial tumour without invasion of the lamina propria, high grade dysplasia;
- T1 tumour invades lamina propria, muscularis mucosae, or submucosa;
- T1a tumour invades lamina propria or muscularis mucosae;
- T1b tumour invades submucosa;
- T2 tumour invades muscularis propria;
- T3 tumour invades subserosa;
- T4 tumour perforates serosa or invades adjacent structures^{1 2 3};
- T4a tumour perforates serosa;
- T4b tumour invades adjacent structures^{1 2 3}.

Notes:

- 1. The adjacent structures of the stomach are the spleen, transverse colon, liver, diaphragm, pancreas, abdominal wall, adrenal gland, kidney, small intestine, and retroperitoneum.
- 2. Intramural extension to the duodenum or oesophagus is classified by the depth of greatest invasion in any of these sites, including stomach.
- 3. Tumour that extends into gastrocolic or gastrohepatic ligaments or into greater or lesser omentum, without perforation of visceral peritoneum, is T3.

N – Regional Lymph Nodes:

- NX regional lymph nodes cannot be assessed;
- N0 no regional lymph node metastasis;
- N1 metastasis in 1 to 2 regional lymph nodes;
- N2 metastasis in 3 to 6 regional lymph nodes;
- N3 metastasis in 7 or more regional lymph nodes;
- N3a metastasis in 7–15 regional lymph nodes;
- N3b metastasis in 16 or more regional lymph nodes.

M – Distant Metastasis:

- M0 no distant metastasis;
- M1 distant metastasis.
- Note. Distant metastasis includes peritoneal seeding, positive peritoneal cytology, and omental tumour not part of continuous extension

Table 4 – Stage Grouping

Stage 0	Tis	N0	M 0
Stage IA	T1	N0	M 0
Stage IB	T2	N0	M0
	T1	N1	M0
Stage IIA	Т3	N0	M0
	T2	N1	M0
	T1	N2	M0
Stage IIB	T4a	N0	M0
	Т3	N1	M0
	T2	N2	M0
	T1	N3	M0
Stage IIIA	T4a	N1	M0
	Т3	N2	M0
	T2	N3	M0
Stage IIIB	T4b	N0, N1	M0
	T4a	N2	M0
	Т3	N3	M0
Stage IIIC	T4a	N3	M0
	T4b	N2, N3	M0
Stage IV	Any T	Any N	M1

Tests
1. Patients with stomach cancer may complain of one or more of the following:
A. Indigestion, dysphagia.
B. Nausea or vomiting.
C. Postprandial fullness, loss of appetite.
D. All of the above.
Correct answer: D.
2. Late complications include the following, except:
A. Pathologic peritoneal and pleural effusions.
B. Obstruction of the gastric outlet, gastroesophageal junction, or small bowel.
C. Nausea or vomiting.
D. Bleeding in the stomach from esophageal varices or at the anastomosis after surgery.
Correct answer: C.
3. Environmental factors implicated in the development of gastric cancer include the following:
A. Diet.

- C. Previous gastric surgery.
- D. All of the above.

- 4. Hereditary syndromes with a predisposition for stomach cancer include the following (two answers):
- A. Hereditary nonpolyposis colorectal cancer.
- B. Familial adenomatous polyposis.
- C. Previous gastric surgery.
- D. Epstein-Barr virus.

Correct answer: A, B.

- 5. Obesity increases the risk of gastric cardia cancer. Is it true?
- A. Yes.
- B. No.

6. What are the different types of stomach cancer?
A. Adenocarcinoma.
B. Lymphoma.
C. Leiomyosarcoma.
D. All of the above.
Correct answer: D.
7. The prognosis of stomach cancer is generally:
A. Poor.
B. Good.
Correct answer: A.
8. The 5-year survival rate for stomach cancer is reported to be less than:
A. 5 %.
B. 10 %.
C. 20 %.
D. 40 %.
Correct answer: C.
9. Adenocarcinoma of the stomach is subclassified according to histologic description as follows:
A. Tubular.
B. Papillary.
B. Papillary. C. Mucinous.
C. Mucinous.
C. Mucinous. D. All of the above.
C. Mucinous. D. All of the above. Correct answer: D.
C. Mucinous. D. All of the above. Correct answer: D. 10. All physical signs of stomach cancer are:
C. Mucinous. D. All of the above. Correct answer: D. 10. All physical signs of stomach cancer are: A. Late events.
C. Mucinous. D. All of the above. Correct answer: D. 10. All physical signs of stomach cancer are: A. Late events. B. Early events.
C. Mucinous. D. All of the above. Correct answer: D. 10. All physical signs of stomach cancer are: A. Late events. B. Early events. Correct answer: A.
C. Mucinous. D. All of the above. Correct answer: D. 10. All physical signs of stomach cancer are: A. Late events. B. Early events. Correct answer: A. 11. Stomach cancer is also more common among:
C. Mucinous. D. All of the above. Correct answer: D. 10. All physical signs of stomach cancer are: A. Late events. B. Early events. Correct answer: A. 11. Stomach cancer is also more common among: A. Older adults (usually those 50 years and older).
C. Mucinous. D. All of the above. Correct answer: D. 10. All physical signs of stomach cancer are: A. Late events. B. Early events. Correct answer: A. 11. Stomach cancer is also more common among: A. Older adults (usually those 50 years and older). B. Men, smokers.
C. Mucinous. D. All of the above. Correct answer: D. 10. All physical signs of stomach cancer are: A. Late events. B. Early events. Correct answer: A. 11. Stomach cancer is also more common among: A. Older adults (usually those 50 years and older). B. Men, smokers. C. Those with a family history of the disease.
C. Mucinous. D. All of the above. Correct answer: D. 10. All physical signs of stomach cancer are: A. Late events. B. Early events. Correct answer: A. 11. Stomach cancer is also more common among: A. Older adults (usually those 50 years and older). B. Men, smokers. C. Those with a family history of the disease. D. All of the above.

- B. Eat too much meat.
- C. Have a history of alcohol abuse.
- D. All of the above.

- 13. Some of the most common symptoms of advanced stomach cancer are the following, except:
- A. Diarrhea.
- B. Nausea/vomiting.
- C. Frequent heartburn.
- D. Loss of appetite (sometimes accompanied by sudden weight loss).

Correct answer: A.

- 14. Some of the most common symptoms of advanced stomach cancer are the following, except:
- A. Constant bloating.
- B. Early satiety (feeling full after eating only a small amount).
- C. Skin itching.
- D. Bloody stools.

Correct answer: C.

- 15. Some of the most common symptoms of advanced stomach cancer are:
- A. Jaundice (a yellowish discolouration in the eyes and skin).
- B. Excessive fatigue.
- C. Stomach pain (which may be worse after meals).
- D. All of the above.

Correct answer: D.

- 16. What are the methods used for diagnosis of stomach cancer?
- A. An upper GI endoscopy (a procedure that uses a small camera on the end of a thin, flexible probe to look at the esophagus and stomach).
- B. A biopsy (tissue sample).
- C. Imaging tests, such as CT scans and X-rays.
- D. All of the above.

- 17. Traditionally, stomach cancer is treated with one or more of the following:
- A. Chemotherapy.
- B. Radiation therapy.
- C. Surgery.
- D. All of the above.

Correct answer: D.	
18. Stomach cancer, when left untreated, may spread to the:	
A. Lungs.	
B. Bones.	
C. Liver.	
D. All of the above.	
Correct answer: D.	
19. Preventing stomach cancer includes:	
A. Maintaining a healthy weight.	
B. Eating a balanced, low-fat diet.	
C. Quitting smoking.	
D. All of the above.	
Correct answer: D.	
20. Imaging tests may be done for a number of reasons, including:	
A. To help find out whether a suspicious area might be cancerous.	
B. To learn how far cancer may have spread.	
C. To help determine if treatment has been effective.	
D. All of the above.	
Correct answer: D.	
21. Stomach cancers that are HER2-positive can be treated with drugs that target the	HER2/neu
protein, such as:	
A. Trastuzumab (Herceptin®).	
B. Letrozole (Femara).	
C. Tamoxifen.	
D. Bevacizumab (Avastin).	
Correct answer: A.	
22. Tumours with increased levels of HER2/neu are called:	
A. HER2-positive.	
B. HER2-negative.	
Correct answer: A.	
23. Stomach cancer is more common:	
A. In women.	

B. In men.

C. In children.

- 24. There is a sharp increase in stomach cancer rates in people over the age of:
- A. 40.
- B. 50.
- C. 60.
- D. 70.

Correct answer: B.

- 25. What is the major cause of stomach cancer?
- A. Diet.
- B. Helicobacter pylori infection.
- C. Previous gastric surgery.
- D. Familial adenomatous polyposis.

Correct answer: B.

- 26. In this condition, excess growth of the stomach lining causes large folds in the lining and leads to low levels of stomach acid. What is it?
- A. Acute gastritis.
- B. Polyps.
- C. Menetrier disease.
- D. All of the above.

Correct answer: C.

- 27. What means T1 of stomach cancer?
- A. The tumour has grown into the mucosa and submucosa layer.
- B. The tumour has grown into the muscle layer of the stomach.
- C. The tumour has grown into the outer lining of the stomach.
- D. The tumour has grown through the stomach wall and into other organs or body structures nearby such as the liver, foodpipe (oesophagus) or abdominal wall.

Correct answer: A.

- 28. What means T2 of stomach cancer?
- A. The tumour has grown into the mucosa and submucosa layer.
- B. The tumour has grown into the muscle layer of the stomach.
- C. The tumour has grown into the outer lining of the stomach.
- D. The tumour has grown through the stomach wall and into other organs or body structures nearby such as the liver, foodpipe (oesophagus) or abdominal wall.

- 29. What means T3 of stomach cancer?
- A. The tumour has grown into the mucosa and submucosa layer.
- B. The tumour has grown into the muscle layer of the stomach.
- C. The tumour has grown into the outer lining of the stomach.
- D. The tumour has grown through the stomach wall and into other organs or body structures nearby such as the liver, foodpipe (oesophagus) or abdominal wall.

Correct answer: C.

- 30. What means T4 of stomach cancer?
- A. The tumour has grown into the mucosa and submucosa layer.
- B. The tumour has grown into the muscle layer of the stomach.
- C. The tumour has grown into the outer lining of the stomach.
- D. The tumour has grown through the stomach wall and into other organs or body structures nearby such as the liver, foodpipe (oesophagus) or abdominal wall.

Correct answer: D.

Colon and rectum

Regional Lymph Nodes

For each anatomical site or subsite the following are regional lymph nodes:

- caecum: ileocolic, right colic;
- ascending colon: ileocolic, right colic, middle colic;
- hepatic flexure: right colic, middle colic;
- transverse colon: right colic, middle colic, left colic, inferior mesenteric;
- splenic flexure: middle colic, left colic, inferior mesenteric;
- descending colon: left colic, inferior mesenteric;
- sigmoid colon: sigmoid, left colic, superior rectal (haemorrhoidal), inferior mesenteric, rectosigmoid;
- rectum: superior, middle, and inferior rectal (haemorrhoidal), inferior mesenteric, internal iliac, mesorectal (paraproctal), lateral sacral, presacral, sacral promontory (Gerota).

Metastases in nodes other than those listed above are classified as distant metastases.

TNM Clinical Classification

T – Primary Tumour:

- TX primary tumour cannot be assessed;
- T0 no evidence of primary tumour;
- Tis¹ carcinoma in situ: intraepithelial or invasion of lamina propria;
- T1 tumour invades submucosa;

- T2 tumour invades muscularis propria;
- T3 tumour invades subserosa or into nonperitonealized pericolic or perirectal tissues;
- T4 tumour directly invades other organs or structures and/or perforates visceral peritoneum;
- T4a tumour perforates visceral peritoneum;
- T4b tumour directly invades other organs or structures² ³.

Notes:

- 1. Tis includes cancer cells confined within the glandular basement membrane (intraepithelial) or mucosal lamina propria (intramucosal) with no extension through the muscularis mucosae into the submucosa.
- 2. Direct invasion in T4b includes invasion of other organs or segments of the colorectum by way of the serosa, as confirmed on microscopic examination, or for tumours in a retroperitoneal or subperitoneal location, direct invasion of other organs or structures by virtue of extension beyond the muscularis propria.
- 3. Tumour that is adherent to other organs or structures, macroscopically, is classified cT4b. However, if no tumour is present in the adhesion, microscopically, the classification should be pT1–3, depending on the anatomical depth of wall invasion

N – Regional Lymph Nodes:

- NX regional lymph nodes cannot be assessed;
- NO no regional lymph node metastasis;
- N1 metastasis in 1–3 regional lymph nodes;
- N1a metastasis in 1 regional lymph node;
- N1b metastasis in 2–3 regional lymph nodes;
- N1c tumour deposit(s), i. e., satellites*, in the subserosa, or in non-peritonealized pericolic or perirectal soft tissue without regional lymph node metastasis;
- N2 metastasis in 4 or more regional lymph nodes;
- N2a metastasis in 4–6 regional lymph nodes;
- N2b metastasis in 7 or more regional lymph nodes.

Note. *Tumour deposits (satellites), i. e., macroscopic or microscopic nests or nodules, in the pericolorectal adipose tissue's lymph drainage area of a primary carcinoma without histological evidence of residual lymph node in the nodule, may represent discontinuous spread, venous invasion with extravascular spread (V1/2) or a totally replaced lymph node (N1/2). If such deposits are observed with lesions that would otherwise be classified as T1 or T2, then the T classification is not changed, but the nodule(s) is recorded as N1c. If a nodule is considered by the pathologist to be a totally replaced lymph node (generally having a smooth contour), it should be recorded as a positive lymph node and not as a satellite, and each nodule should be counted separately as a lymph node in the final pN determination.

M – Distant Metastasis:

M0 – no distant metastasis;

M1 – distant metastasis;

M1a – metastasis confined to one organ (liver, lung, ovary, non-regional lymph node(s);

M1b – metastasis in more than one organ or the peritoneum.

Table 5 – Stage Grouping

Stage 0	Tis	N0	M0
Stage I	T1, T2	N0	M0
Stage II	T3, T4	N0	M0
Stage IIA	Т3	N0	M0
Stage IIB	T4a	N0	M0
Stage IIC	T4b	N0	M0
Stage III	Any T	N1, N2	M0
Stage IIIA	T1, T2	N1	M0
	T1	N2a	M0
Stage IIIB	T3, T4a	N1	M0
	T2, T3	N2a	M0
	T1, T2	N2b	M0
Stage IIIC	T4a	N2a	M0
	T3, T4a	N2b	M0
	T4b	N1, N2	M0
Stage IV	A Any T	Any N	M1a
Stage IVB	Any T	Any N	M1b

Tests

- 1. Factors that may increase risk of colon cancer include the following, except:
- A. Older age.
- B. A personal history of colorectal cancer or polyps.
- C. Inflammatory intestinal conditions.
- D. Weakness and fatigue.

Correct answer: D.

- 2. Factors that may increase risk of colon cancer include the following, except:
- A. Low-fiber, high-fat diet.
- B. A sedentary lifestyle.
- C. Obesity.
- D. Quit smoking.

Correct answer: D.

3. Colorectal cancer may cause one or more of these symptoms:

- A. A change in bowel habits, such as diarrhea, constipation, or narrowing of the stool that lasts for more than a few days.
- B. A feeling that you need to have a bowel movement that is not relieved by doing so.
- C. Rectal bleeding.
- D. All of the above.

Correct answer: D.

- 4. Colorectal cancer may cause one or more of these symptoms:
- A. Blood in the stool, which may cause the stool to look dark.
- B. Cramping or abdominal (belly) pain.
- C. Weakness and fatigue.
- D. All of the above.

Correct answer: D.

- 5. The symptoms of bowel obstruction include the following, except:
- A. Abdominal distension.
- B. Older age.
- C. Abdominal pain.
- D. Unexplained, persistent nausea or vomiting.

Correct answer: B.

- 6. Colon tumor categorie of T2 are as follows:
- A. The cancer has grown through the muscularis mucosa and extends into the submucosa.
- B. The cancer has grown through the submucosa and extends into the muscularis propria.
- C. The cancer has grown through the muscularis propria and into the outermost layers of the colon but not through them; it has not reached any nearby organs or tissues.
- D. The cancer has grown through the wall of the colon and is attached to or invades nearby tissues or organs.

Correct answer: B.

- 7. How can colon cancer be prevented?
- A. Quit smoking.
- B. Engage in physical activity every day.
- C. Eat a variety of fruits and vegetables every day.
- D. All of the above.

- 8. Will salt increase cancer risk?
- A. Yes.

B. No.
Correct answer: A.
9. How does eating fruits and vegetables affect cancer risk?
A. Increase.
B. Decrease.
Correct answer: B.
10. The most common forms of inherited colon cancer syndromes are:
A. Familial adenomatous polyposis (FAP).
B. Hereditary nonpolyposis colorectal cancer (HNPCC).
C. Lynch syndrome.
D. All of the above.
Correct answer: D.
11. Most colorectal cancers begin as a polyp, a growth in the tissue that lines the inner surface of
the colon or rectum. Is it true?
A. Yes.
B. No.
Correct answer: A.
12. Polyps are common in people older than:
A. 50 years of age.
B. 30 years of age.
C. 30 years of age.
D. 80 years of age.
Correct answer: A.
13. What methods are used to screen people for colorectal cancer?
A. Fecal occult blood tests (FOBT).
B. Sigmoidoscopy.
C. Colonoscopy.
D. All of the above.
Correct answer: D.
14. Studies suggest that colonoscopy reduces deaths from colorectal cancer by about:
A. 60 to 70 percent.
B. 50 to 60 persent.
C. 40 to 50 persent.

D. 30 to 40 persent.

Correct answer: A

- 15. The decision about which test to have usually takes into account several factors, including:
- A. The person's age, medical history, family history, and general health.
- B. The potential harms of the test.
- C. The preparation required for the test.
- D. All of the above.

Correct answer: D.

- 16. The decision about which test to have usually takes into account several factors, including:
- A. The follow-up care needed after the test.
- B. The convenience of the test.
- C. The cost of the test and the availability of insurance coverage.
- D. All of the above.

Correct answer: D.

- 17. The advantages of fecal occult blood test include the following, except:
- A. The test does not detect some polyps and cancers.
- B. No cleansing of the colon is necessary.
- C. No dietary restrictions are needed before FIT.
- D. Samples can be collected at home.

Correct answer: A.

- 18. The advantages of fecal occult blood test include the following, except:
- A. Cost is low compared with other colorectal cancer screening tests.
- B. There is no risk of damage to the lining of the colon.
- C. No sedation is needed.
- D. Additional procedures, such as colonoscopy, may be needed if the test result shows blood in the stool.

Correct answer: D.

- 19. The disadvantages of fecal occult blood test include the following:
- A. The test does not detect some polyps and cancers.
- B. False-positive test results (i. e., the test suggests an abnormality when none is present) are possible.
- C. Dietary restrictions are needed before guaiac FOBT.
- D. All of the above.

Correct answer: D.

20. The advantages of sigmoidoscopy include the following:

A. For most patients, discomfort is minimal, and complications are rare.

B. The doctor can perform a biopsy or polypectomy (removal of a polyp or adenoma) during the

test, if necessary.

C. Less extensive cleansing of the colon is necessary for this test than for a colonoscopy.

D. All of the above.

Correct answer: D.

21. The disadvantages of sigmoidoscopy include the following, except:

A. Abnormal growths in the upper part of the colon will be missed because the test allows the

doctor to view only the rectum and the lower part of the colon.

B. Bowel cleansing is needed before the test.

C. Medication and diet changes may be needed before the test.

D. For most patients, discomfort is minimal, and complications are rare.

Correct answer: D.

22. The advantages of colonoscopy include the following:

A. This test is one of the most sensitive currently available.

B. It allows the doctor to view the rectum and the entire colon.

C. The doctor can perform a biopsy or polypectomy during the test if necessary.

D. All of the above.

Correct answer: D.

23. Colorectal cancer is the third most common type of non-skin cancer in both men (after prostate

cancer and lung cancer) and women (after breast cancer and lung cancer). Is it true?

A. Yes.

B. No.

Correct answer: A.

24. Can polyps be flat?

A. Yes.

B. No.

Correct answer: A.

25. Most polyps are not cancers. Is it true?

A. Yes.

B. No.

Correct answer: A.

26. The rates of new colorectal cancer cases and deaths among adults aged 50 years or older are:

A. Decreasing.

C. Stable.
Correct answer: B.
27. Most colorectal cancers are:
A. Adenocarcinomas.
B. Squamous cell carcinomas.
C. Lymphomas.
D. Sarcomas.
Correct answer: A.
28. Can finding and removing polyps prevent colorectal cancer?
A. Yes.
B. No.
Correct answer: A.
29. Right-sided colon cancers cause:
A. Iron deficiency anemia.
B. Rectal bleeding.
C. Unexplained, persistent nausea or vomiting.
D. Obesity.
Correct answer: A.
30. Before traveling to distant organs colorectal cancers most commonly spread first to
A. Local lymph nodes.
B. Liver.
C. Bones.
D. Lungs.
Correct answer: A.
Liver
Regional Lymph Nodes
The regional lymph nodes are the hilar, hepatic (along the proper hepatic artery), periportal
(along the portal vein) and those along the abdominal inferior vena cava above the renal veins
(except the inferior phrenic nodes).

T – Primary Tumour:

B. Increasing.

TX – primary tumour cannot be assessed;

T0 – no evidence of primary tumour;

TNM Clinical Classification

- T1 solitary tumour without vascular invasion;
- T2 solitary tumour with vascular invasion or multiple tumours, none more than 5 cm in greatest dimension;
- T3 multiple tumours any more than 5 cm or tumour involving a major branch of the portal or hepatic vein(s);
 - T3a multiple tumours any more than 5 cm;
 - T3b tumour involving a major branch of the portal or hepatic vein(s);
- T4 tumour(s) with direct invasion of adjacent organs other than the gallbladder or with perforation of visceral peritoneum.

N – Regional Lymph Nodes:

- NX regional lymph nodes cannot be assessed;
- N0 no regional lymph node metastasis;
- N1 regional lymph node metastasis.

M – Distant Metastasis:

- M0 no distant metastasis;
- M1 distant metastasis.

Table 6 – Stage Grouping

Stage I	T1	N0	M0
Stage II	T2	N0	M0
Stage IIIA	T3a	N0	M0
Stage IIIB	T3b	N0	M0
Stage IIIC	T4	N0	M0
Stage IVA	Any T	N1	M0
Stage IVB	Any T	Any N	M1

Tests

- 1. There are main risk factors and causes of the liver cancer:
- A. Age.
- B. Cirrhosis.
- C. Aflatoxin.
- D. All of the above.

- 2. Other rare risk factors include:
- A. Anabolic steroids.
- B. Medical history of diabetes.
- C. Increased body weight.

Correct answers: B, D.
4. There are two rare types of primary liver cancer (two answers):
A. Angiosarcomas.
B. Hepatocellular carcinoma.
C. Hepatoblastomas.
D. Cholangiocarcinoma.
Correct answer: A, C.
5. The main symptoms of primary liver cancer are the following, except:
A. Feeling sick (nausea).
B. Jaundice.
C. Ascites.
D. Bone pain.
Correct answer: D.
6. Other possible symptoms include:
A. Loss of appetite.
B. Unexplained weight loss.
C. Feeling sick (nausea).
D. All of the above.
Correct answer: D.
7. Surgical treatment of liver cancer includes:
A. Liver transplant.
B. Liver resection.
C. Chemotherapy.
D. All of the above.
Correct answer: D.
8. The chemotherapy drugs that may be used include:
A. Cisplatin.
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D. All of the above.

Correct answer: D.

A. Angiosarcoma.

C. Hepatoblastoma.

D. Cholangiocarcinoma.

B. Hepatocellular carcinoma.

3. There are main types of primary liver cancer (two answers):

D. All of the above.
Correct answer: D.
9. Is it true: radiotherapy is not often used to treat primary liver cancer?
A. Yes.
B. No.
Correct answer: A.
10. Clinical symptoms in the early stages of primary liver cancer may include:
A. No symptoms.
B. Jaundice.
C. Ascites.
D. Pain.
Correct answer: A.
11. Most liver cancer is:
A. Primary.
B. Secondary or metastatic.
Correct answer: B.
12. Primary liver cancer, which starts in the liver, accounts for about:
A. 2 % of cancers.
B. 10 % of cancers.
C. 15 % of cancers.
D. 20 % of cancers.
Correct answer: A.
13. Primary liver cancer strikes twice as many men as women. Is it true?
A. Yes.
B. No.
Correct answer: A.
14. More common benign tumours of the liver include:
A. Cysts.
B. Hepatic adenoma.
C. Focal nodular hyperplasia.
D. All of the above.
Correct answer: D.

B. Gemcitabine (Gemzar®).

C. Doxorubicin.

16. More common benign tumors of the liver include the following, except:
A. Hemangioma.
B. Cysts.
C. Cholangiocarcinoma.
D. Fibroma.
Correct answer: C.
17. Liver cancers include (two answers):
A. Hepatocellular carcinoma (HCC).
B. Cholangiocarcinoma.
C. Lipoma.
D. Fibroma.
Correct answers: A, B.
18. Primary liver cancer tends to occur in livers damaged by:
A. Alcohol abuse.
B. Hepatitis B and C.
C. Hemochromatosis.
D. All of the above.
Correct answer: D.
19. The risk factors for liver cancer may include the following, except:
A. Anabolic steroid use.
B. Young age.
C. History of diabetes.
D. Inherited metabolic diseases.
Correct answer: B.
20. Aflatoxins can contaminate the following, except:
A. Wheat, peanuts.
B. Rice, corn.

15. What is the most common benign tumour of the liver?

A. Hemangioma.

Correct answer: A.

C. Apples, pears.

B. Cysts.

C. Lipoma.D. Fibroma.

D. Soybeans.
Correct answer: C.
21. Can obesity increase the risk of hepatocellular carcinoma?
A. Yes.
B. No.
Correct answer: A.
22. The most common cancers that spread to the liver are:
A. Breast.
B. Colorectal.
C. Stomach.
D. All of the above.
Correct answer: D.
23. How is liver cancer diagnosed?
A. Blood tests.
B. Imaging studies.
C. Liver biopsy.
D. All of the above.
Correct answer: D.
24. Blocking the blood supply to the cancer can be done using a procedure called:
A. Embolization.
B. Ablation therapy.
C. Chemotherapy.
D. Radiation therapy.
Correct answer: A.
25. What is the targeted drug use for blocking chemicals that signal cancer cells to grow and divide?
A. Trastuzumab (Herceptin).
B. Lapatinib (Tykerb).
C. Sorafenib (Nexavar).
D. Bevacizumab (Avastin).
Correct answer: C.
26. Side effects of Sorafenib (Nexavar) include:
A. Fatigue.
B. Rash.
C. High blood pressure.
D. All of the above.

- 27. Are there alternative and complementary therapies for liver cancer?
- A. Acupuncture.
- B. Herbal therapy.
- C. Herbal supplements.
- D. All of the above.

Correct answer: D.

- 28. Can liver cancer be prevented?
- A. Yes.
- B. No.
- C. Not in all cases.

Correct answer: C.

- 29. A rising level of alfa-fetoprotein is suspicious for:
- A. Stomach cancer.
- B. Lung cancer.
- C. Liver cancer.
- D. Skin cancer.

Correct answer: C.

- 30. The risk factors for liver cancer in cirrhosis are:
- A. Being male.
- B. Age of 55 years or older.
- C. Asian or Hispanic ethnicity.
- D. All of the above.

Correct answer: D.

Pancreas

Regional Lymph Nodes

The regional lymph nodes are the peripancreatic nodes, which may be subdivided as follows:

- superior: superior to head and body;
- inferior: inferior to head and body;
- interior: anterior pancreaticoduodenal, pyloric (for tumours of head only), and proximal mesenteric:
 - posterior: posterior pancreaticoduodenal, common bile duct, and proximal mesenteric;
 - splenic: hilum of spleen and tail of pancreas (for tumours of body and tail only);
 - coeliac: for tumours of head only.

TNM Clinical Classification

T – Primary Tumour:

TX – primary tumour cannot be assessed;

T0 – no evidence of primary tumour;

Tis – carcinoma in situ*;

- T1 tumour limited to pancreas, 2 cm or less in greatest dimension;
- T2 tumour limited to pancreas, more than 2 cm in greatest dimension;
- T3 tumour extends beyond pancreas, but without involvement of coeliac axis or superior mesenteric artery;
- T4 tumour involves coeliac axis or superior mesenteric artery.

Note. *Tis also includes the 'PanIN-III' classification

N – Regional Lymph Nodes:

- NX regional lymph nodes cannot be assessed;
- N0 no regional lymph node metastasis;
- N1 regional lymph node metastasis.

M – Distant Metastasis:

M0 – no distant metastasis;

M1 – distant metastasis.

Table 7 – Stage Grouping

Stage 0	Tis	N0	M0
Stage IA	T1	N0	M0
Stage IB	T2	N0	M0
Stage IIA	Т3	N0	M0
Stage IIB	T1, T2, T3	N1	M0
Stage III	T4	Any N	M0
Stage IV	Any T	Any N	M1

Tests

- 1. Signs and symptoms of pancreatic cancer often don't occur until the disease is advanced. When signs and symptoms do appear, they may include:
- A. Upper abdominal pain that may radiate to back.
- B. Yellowing of your skin and the whites of eyes (jaundice).
- C. Loss of appetite, weight loss.
- D. All of the above.

Correct answer: D.

- 2. Factors that may increase your risk of pancreatic cancer include the following, except:
- A. Barrett's esophagus.
- B. African-American race.
- C. Excess body weight.
- D. Chronic inflammation of the pancreas (pancreatitis).

- 3. Factors that may increase risk of pancreatic cancer include the following, except:
- A. Diabetes.
- B. Helicobacter pylori infection.
- C. Family history of genetic syndromes that can increase cancer risk, including a BRCA2 gene mutation, Lynch syndrome and familial atypical mole-malignant melanoma (FAMMM).
- D. Personal or family history of pancreatic cancer.

Correct answer: B.

- 4. As pancreatic cancer progresses, it can cause complications such as:
- A. Jaundice.
- B. Pain.
- C. Bowel obstruction.
- D. All of the above.

Correct answer: D.

- 5. What is distal pancreatectomy?
- A. Surgery to remove the tail of the pancreas or the tail and a small portion of the body.
- B. Surgery to remove the head of the pancreas.

Correct answer: A.

- 6. What is the targeted drug use for blocking chemicals that signal cancer cells to grow and divide?
- A. Trastuzumab (Herceptin).
- B. Lapatinib (Tykerb).
- C. Erlotinib (Tarceva).
- D. Bevacizumab (Avastin).

Correct answer: C.

- 7. There are steps to reduce risk of pancreatic cancer, including:
- A. Stop smoking.
- B. Maintain a healthy weight.
- C. Choose a healthy diet.
- D. All of the above.

- 8. If the pancreatic cancer is located in the head of the pancreas, patient may consider an operation called:
- A. Pancreatoduodenectomy.
- B. Distal pancreatectomy.

Correct answer: A.

- 9. Clinical trials are studies to test new forms of treatment, such as:
- A. New drugs.
- B. New approaches to surgery or radiation treatments.
- C. Novel methods such as gene therapy.
- D. All of the above.

Correct answer: D.

- 10. Pancreatic cancer that blocks the liver's bile duct can cause jaundice. What are the clinical symptoms of jaundice?
- A. Yellow skin and eyes.
- B. Dark-coloured urine.
- C. Pale-coloured stools.
- D. All of the above.

Correct answer: D.

- 11. What are the clinical symptoms of pancreatic cancer?
- A. Jaundice.
- B. Abdominal or back pain.
- C. Weight loss and poor appetite.
- D. All of the above.

Correct answer: D.

- 12. Patients with pancreatic cancer have the following digestive problems, except:
- A. Pale, greasy stools.
- B. Nausea.
- C. Vomiting.
- D. Acute gastritis.

Correct answer: D.

- 13. Factors that may increase your risk of pancreatic cancer include the following, except:
- A. Excess body weight.
- B. Family history of genetic syndromes that can increase cancer risk, including a BRCA2 gene mutation, Lynch syndrome and familial atypical mole-malignant melanoma (FAMMM).
- C. Smoking.
- D. Past Epstein-Barr infection.

- 14. What are the methods used for diagnosis of pancreatic cancer?
- A. Imaging tests.
- B. An endoscopic ultrasound.
- C. Endoscopic retrograde cholangiopancreatography.
- D. All of the above.

Correct answer: D.

- 15. One tumour marker test used in pancreatic cancer is called:
- A. CA15-3.
- B. CA19-9.
- C. CA125.
- D. PSA.

Correct answer: B.

- 16. The stage I of pancreatic cancer is:
- A. Cancer is confined to the pancreas.
- B. Cancer has spread beyond the pancreas to nearby tissues and organs and may have spread to the lymph nodes.
- C. Cancer has spread beyond the pancreas to the major blood vessels around the pancreas and may have spread to the lymph nodes.
- D. Cancer has spread to distant sites beyond the pancreas, such as the liver, lungs and the lining that surrounds your abdominal organs (peritoneum).

Correct answer: A.

- 17. The stage II of pancreatic cancer is:
- A. Cancer is confined to the pancreas.
- B. Cancer has spread beyond the pancreas to nearby tissues and organs and may have spread to the lymph nodes.
- C. Cancer has spread beyond the pancreas to the major blood vessels around the pancreas and may have spread to the lymph nodes.
- D. Cancer has spread to distant sites beyond the pancreas, such as the liver, lungs and the lining that surrounds your abdominal organs (peritoneum).

- 18. The stage III of pancreatic cancer is:
- A. Cancer is confined to the pancreas.
- B. Cancer has spread beyond the pancreas to nearby tissues and organs and may have spread to the lymph nodes.
- C. Cancer has spread beyond the pancreas to the major blood vessels around the pancreas and may have spread to the lymph nodes.
- D. Cancer has spread to distant sites beyond the pancreas, such as the liver, lungs and the lining that surrounds your abdominal organs (peritoneum).

Correct answer: C.

- 19. The stage IV of pancreatic cancer is:
- A. Cancer is confined to the pancreas.
- B. Cancer has spread beyond the pancreas to nearby tissues and organs and may have spread to the lymph nodes.
- C. Cancer has spread beyond the pancreas to the major blood vessels around the pancreas and may have spread to the lymph nodes.
- D. Cancer has spread to distant sites beyond the pancreas, such as the liver, lungs and the lining that surrounds your abdominal organs (peritoneum).

Correct answer: D.

- 20. What is Whipple procedure?
- A. Pancreatoduodenectomy.
- B. Distal pancreatectomy.
- C. Radiation therapy.
- D. Chemotherapy.

Correct answer: A.

- 21. The most common type of pancreatic cancer is:
- A. Adenocarcinoma.
- B. Squamous cell carcinoma.
- C. Lymphomas.
- D. Sarcomas.

- 22. The rates of new pancreatic cancer cases and deaths among adults aged 50 years or older are:
- A. Decreasing.
- B. Increasing.
- C. Stable.

Correct answer: B.
23. The risk of developing pancreatic cancer is lower among non-smokers, and people who
maintain a healthy weight and limit their consumption of red or processed meat. Is it true?
A. Yes.
B. No.
Correct answer: A.
24. Pancreatic adenocarcinoma typically has a very:
A. Good prognosis.
B. Poor prognosis.
Correct answer: B.
25. The many types of pancreatic cancer can be divided into two general groups (two answers):
A. Exocrine cancer.
B. Hormone-producing (endocrine) cancer.
C. Neuroendocrine cancer.
D. Pancreatoblastoma.
Correct answers: A, B.
26. Secondary pancreatic cancers that have spread from other parts of the body can be found in only
about:
A. 2 % of cases.
B. 10 % of cases.
C. 20 % of cases.
D. 30 % of cases.
Correct answer: A.
27. Hereditary pancreatitis gives a greatly ncreased lifetime risk of pancreatic cancer of
30–40 % to the age of:
A. 50.
B. 60.
C. 70.
D. 80.
Correct answer: C.

- 28. Locally advanced adenocarcinomas have spread into neighboring organs, which may be any of the following, except:
- A. Duodenum.
- B. Stomach.
- C. Transverse colon.
- D. Lungs.

Correct answer: D.

- 29. Typical sites for metastatic spread (stage IV disease) are:
- A. Liver.
- B. Peritoneal cavity.
- C. Lungs.
- D. All of the above.

Correct answer: D.

- 30. Overall five-year survival for pancreatic cancer is:
- A. 2 %.
- B. 6 %.
- C. 15 %.
- D. 20 %.

Correct answer: B.

Lung

Regional Lymph Nodes

The regional lymph nodes are the intrathoracic nodes (mediastinal, hilar, lobar, interlobar, segmental, and subsegmental), scalene, and supraclavicular lymph nodes.

TNM Clinical Classification

T – Primary Tumour:

TX – primary tumour cannot be assessed, or tumour proven by the presence of malignant cells in sputum or bronchial washings but not visualized by imaging or bronchoscopy;

T0 – no evidence of primary tumour;

Tis – carcinoma in situ;

T1 – tumour 3 cm or less in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus (i. e., not in the main bronchus)¹;

T1a – tumour 2 cm or less in greatest dimension¹;

T1b – tumour more than 2 cm but not more than 3 cm in greatest dimension¹;

T2 – tumour more than 3 cm but not more than 7 cm; or tumour with any of the following features²:

- involves main bronchus, 2 cm or more distal to the carina;
- invades visceral pleura;
- associated with atelectasis or obstructive pneumonitis that extends to the hilar region but does not involve the entire lung;

T2a – tumour more than 3 cm but not more than 5 cm in greatest dimension;

T2b – tumour more than 5 cm but not more than 7 cm in greatest dimension;

T3 – tumour more than 7 cm or one that directly invades any of the following: chest wall (including superior sulcus tumours), diaphragm, phrenic nerve, mediastinal pleura, parietal pericardium; or tumour in the main bronchus less than 2 cm distal to the carina but without involvement of the carina; or associated atelectasis or obstructive pneumonitis of the entire lung or separate tumour nodule(s) in the same lobe as the primary;

T4 Tumour of any size that invades any of the following: mediastinum, heart, great vessels, trachea, recurrent laryngeal nerve, oesophagus, vertebral body, carina; separate tumour nodule(s) in a different ipsilateral lobe to that of the primary.

N – Regional Lymph Nodes:

NX – regional lymph nodes cannot be assessed;

N0 – no regional lymph node metastasis;

N1 – metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, including involvement by direct extension;

N2 – metastasis in ipsilateral mediastinal and/or subcarinal lymph node(s);

N3 – metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph node(s).

M – Distant Metastasis:

M0 – no distant metastasis;

M1 – distant metastasis;

M1a – separate tumour nodule(s) in a contralateral lobe; tumour with pleural nodules or malignant pleural or pericardial effusion³;

M1b – distant metastasis.

Notes:

- 1. The uncommon superficial spreading tumour of any size with its invasive component limited to the bronchial wall, which may extend proximal to the main bronchus, is also classified as T1a.
- 2. T2 tumours with these features are classified T2a if 5 cm or less, or if size cannot be determined and T2b if greater than 5 cm but not larger than 7 cm.

3. Most pleural (pericardial) effusions with lung cancer are due to tumour. In a few patients, however, multiple microscopical examinations of pleural (pericardial) fluid are negative for tumour, and the fluid is nonbloody and is not an exudate. Where these elements and clinical judgement dictate that the effusion is not related to the tumour, the effusion should be excluded as a staging element and the patient should be classified as M0

Table 8 – Stage Grouping

Occult carcinoma	TX	N0	M0
Stage 0	Tis	N0	M0
Stage IA	T1a, b	N0	M0
Stage IB	T2a	N0	M0
Stage IIA	T2b	N0	M0
	T1a, b	N1	M0
	T2a	N1	M0
Stage IIB	T2b	N1	M0
	T3	N0	M0
Stage IIIA	T1a, b, T2a, b	N2	M0
	Т3	N1, N2	M0
	T4	N0, N1	M0
Stage IIIB	T4	N2	M0
	Any T	N3	M0
Stage IV	Any T	Any N	M1

Tests

- 1. Signs and symptoms of lung cancer may include:
- A. A new cough that doesn't go away.
- B. Changes in a chronic cough or "smoker's cough".
- C. Coughing up blood, even a small amount.
- D. All of the above.

Correct answer: D.

- 2. Symptoms of lung cancer that may occur elsewhere in the body:
- A. Loss of appetite or unexplained weight loss.
- B. Muscle wasting (also known as cachexia).
- C. Fatigue.
- D. All of the above.

- 3. What are the different types of lung cancer? (Two answers):
- A. Small cell lung cancer.
- B. Non-small cell lung cancer.

- C. Adenocarcinoma.
- D. Squamous cell carcinoma.
- Correct answers: A, B.
- 4. Non-small cell lung cancers include the following, except:
- A. Small cell lung cancer.
- B. Adenocarcinoma.
- C. Squamous cell carcinoma.
- D. Large cell carcinoma.
- Correct answer: A.
- 5. Risk factors for lung cancer include the following, except:
- A. Smoking.
- B. Exposure to asbestos and other chemicals.
- C. Exposure to radon gas.
- D. Being female.
- Correct answer: D.
- 6. Lung cancer can cause complications, such as:
- A. A new cough that doesn't go away.
- B. Coughing up blood.
- C. Pain.
- D. Fluid in the chest (pleural effusion).
- Correct answer: D.
- 7. Lung cancer often spreads (metastasizes) to following parts of the body, except:
- A. Brain.
- B. Stomach.
- C. Bones.
- D. Liver.
- Correct answer: B.
- 8. Procedures to remove lung cancer include:
- A. Segmental resection to remove a larger portion of lung, but not an entire lobe.
- B. Lobectomy to remove the entire lobe of one lung.
- C. Pneumonectomy to remove an entire lung.
- D. All of the above.
- Correct answer: D.
- 9. Targeted therapy options for treating lung cancer include:

- A. Trastuzumab (Herceptin).B. Bevacizumab (Avastin).
- C. Lapatinib.
- D. Crizotinib (Xalkori).

Correct answer: B.

- 10. Can nonsmokers get lung cancer?
- A. Yes.
- B. No.

Correct answer: A.

- 11. What is the number one cause of lung cancer?
- A. Smoking.
- B. Exposure to asbestos and other chemicals.
- C. Exposure to radon gas.
- D. Being male.

Correct answer: A.

- 12. This type of lung cancer is more common in women than in men, and it is more likely to occur in younger people than other types of lung cancer:
- A. Small cell lung cancer.
- B. Adenocarcinoma.
- C. Squamous cell carcinoma.
- D. Large cell carcinoma.

Correct answer: B.

- 13. About 25 % to 30 % of all lung cancers are:
- A. Squamous cell carcinomas.
- B. Adenocarcinoma.
- C. Small cell lung cancer.
- D. Large cell carcinoma.

Correct answer: A.

- 14. About 10 % to 15 % of all lung cancers are:
- A. Squamous cell carcinomas.
- B. Adenocarcinoma.
- C. Small cell lung cancer.
- D. Large cell carcinoma.

- 15. About 40 % of all lung cancers are:
- A. Squamous cell carcinomas.
- B. Adenocarcinoma.
- C. Small cell lung cancer.
- D. Large cell carcinoma.

Correct answer: B.

- 16. About 10 % of all lung cancers are:
- A. Squamous cell carcinomas.
- B. Adenocarcinoma.
- C. Small cell lung cancer.
- D. Large cell carcinoma.

Correct answer: D.

- 17. About 85 % to 90 % of lung cancers are:
- A. Non-small cell lung cancer (NSCLC).
- B. Small cell lung cancer (SCLC).

Correct answer: A.

- 18. About 10 % to 15 % of lung cancers are:
- A. Non-small cell lung cancer (NSCLC).
- B. Small cell lung cancer (SCLC).

Correct answer: B.

- 19. About 80 % of lung cancer deaths are thought to result from:
- A. Smoking.
- B. Exposure to asbestos and other chemicals.
- C. Exposure to radon gas.
- D. Chronic fatigue.

Correct answer: A.

- 20. Other carcinogens found in some workplaces that can increase lung cancer risk include:
- A. Radioactive ores such as uranium.
- B. Inhaled chemicals such as arsenic, beryllium, cadmium, silica, vinyl chloride, nickel compounds, chromium compounds, coal products, mustard gas, and chloromethyl ethers.
- C. Diesel exhaust.
- D. All of the above.

Correct answer: D.

21. Can beta carotene supplements decrease the risk of lung cancer?

A. Yes.

B. No.

Correct answer: B.

- 22. What is limited stage of small cell lung cancer (SCLC)?
- A. Cancer is found on one side of the chest, involving just one part of the lung and nearby lymph nodes.
- B. Cancer has spread to other regions of the chest or other parts of the body.

Correct answer: A.

- 23. What is extensive stage of small cell lung cancer (SCLC)?
- A. Cancer is found on one side of the chest, involving just one part of the lung and nearby lymph nodes.
- B. Cancer has spread to other regions of the chest or other parts of the body.

Correct answer: B.

- 24. What is stage I of non-small cell lung cancer?
- A. The cancer is located only in the lungs and has not spread to any lymph nodes.
- B. The cancer is in the lung and nearby lymph nodes.
- C. Cancer is found in the lung and in the lymph nodes in the middle of the chest, also described as locally advanced disease.
- D. This is the most advanced stage of lung cancer, and is also described as advanced disease. This is when the cancer has spread to both lungs, to fluid in the area around the lungs, or to another part of the body, such as the liver or other organs.

Correct answer: A.

- 25. What is stage II of non-small cell lung cancer?
- A. The cancer is located only in the lungs and has not spread to any lymph nodes.
- B. The cancer is in the lung and nearby lymph nodes.
- C. Cancer is found in the lung and in the lymph nodes in the middle of the chest, also described as locally advanced disease.
- D. This is the most advanced stage of lung cancer, and is also described as advanced disease. This is when the cancer has spread to both lungs, to fluid in the area around the lungs, or to another part of the body, such as the liver or other organs.

- 26. What is stage III of non-small cell lung cancer?
- A. The cancer is located only in the lungs and has not spread to any lymph nodes.
- B. The cancer is in the lung and nearby lymph nodes.
- C. Cancer is found in the lung and in the lymph nodes in the middle of the chest, also described as locally advanced disease.

D. This is the most advanced stage of lung cancer, and is also described as advanced disease. This is when the cancer has spread to both lungs, to fluid in the area around the lungs, or to another part of the body, such as the liver or other organs.

Correct answer: C.

27. What is stage IV of non-small cell lung cancer?

A. The cancer is located only in the lungs and has not spread to any lymph nodes.

B. The cancer is in the lung and nearby lymph nodes.

C. Cancer is found in the lung and in the lymph nodes in the middle of the chest, also described as locally advanced disease.

D. This is the most advanced stage of lung cancer, and is also described as advanced disease. This is when the cancer has spread to both lungs, to fluid in the area around the lungs, or to another part of the body, such as the liver or other organs.

Correct answer: D.

28. What is stage IIIA of non-small cell lung cancer?

A. The cancer is located only in the lungs and has not spread to any lymph nodes.

B. The cancer is in the lung and nearby lymph nodes.

C. If the cancer has spread only to lymph nodes on the same side of the chest where the cancer started.

D. If the cancer has spread to the lymph nodes on the opposite side of the chest, or above the collar bone.

Correct answer: C.

29. What is stage IIIB of non-small cell lung cancer?

A. The cancer is located only in the lungs and has not spread to any lymph nodes.

B. The cancer is in the lung and nearby lymph nodes.

C. If the cancer has spread only to lymph nodes on the same side of the chest where the cancer started.

D. If the cancer has spread to the lymph nodes on the opposite side of the chest, or above the collar bone.

Correct answer: D.

30. Symptoms of lung cancer that are in the chest:

A. Coughing, especially if it persists or becomes intense.

B. Pain in the chest, shoulder, or back unrelated to pain from coughing.

C. A change in color or volume of sputum.

D. All of the above.

Mediastinal tumours

Regional Lymph Nodes

The regional lymph nodes are the intrathoracic nodes (mediastinal, hilar, lobar, interlobar, segmental, and subsegmental), scalene, and supraclavicular lymph nodes.

Tests

1. The mediastinum is divided into:

A. One section.B. Two sections.C. Three sections.D. Five sections.

D. All of the above. Correct answer: C.

Correct answer: C.
2. The mediastinum contains the:
A. Heart, aorta, esophagus, thymus and trachea.
B. Heart, aorta, esophagus, thymus and stomach.
C. Heart, aorta, esophagus, thymus and lungs.
D. Heart, aorta, esophagus, thymus and bones.
Correct answer: A.
3. Mediastinal tumours are usually diagnosed in patients aged:
A. 20 to 30 years.
B. 30 to 50 years.
C. 50 to 60 years.
D. 60 to 70 years.
Correct answer: B.
4. In adults, most mediastinal tumours occur in the:
A. Anterior (front) mediastinum.
B. Middle mediastinum.
C. Posterior (back) mediastinum.
D. All of the above.
Correct answer: A.
5. In children, tumours are commonly found in the:
A. Anterior (front) mediastinum.
B. Middle mediastinum.
C. Posterior (back) mediastinum.

- 6. What are the symptoms of a mediastinal tumour? A. Cough. B. Shortness of breath. C. Chest pain. D. All of the above. Correct answer: D. 7. What are the symptoms of a mediastinal tumour? A. Fever, chills. B. Night sweats. C. Coughing up blood, hoarseness. D. All of the above. Correct answer: D. 8. What are the symptoms of a mediastinal tumour? A. Unexplained weight loss. B. Lymphadenopathy (swollen or tender lymph nodes). C. Wheezing. D. All of the above. Correct answer: D. 9. What are the benefits of minimally invasive surgery to treat mediastinal tumours? A. Decreased postoperative pain. B. Shorter hospital stay. C. More rapid recovery and return to work. D. All of the above. Correct answer: D. 10. The possible complications of minimally invasive surgical treatment include the following,
- A. Damage to the surrounding area.
- B. Postoperative drainage.
- C. Postoperative infection or bleeding.
- D. Unexplained weight loss.

Correct answer: D.

except:

- 11. Complications of mediastinal tumours include the following, except:
- A. Spinal cord compression.
- B. Spread to nearby structures such as the heart, lining around the heart (pericardium).

C. Night sweats.	
D. Spread to great vessels (aorta and vena cava).	
Correct answer: C.	
12. What are the methods used for examination of mediastinal tumours?	
A. Chest x-ray.	
B. CT-guided needle biopsy.	
C. CT scan of the chest.	
D. All of the above.	
Correct answer: D.	
13. What are the methods used for examination of mediastinal tumours?	
A. Mediastinoscopy with biopsy.	
B. MRI of the chest.	
C. CT scan of the chest.	
D. All of the above.	
Correct answer: D.	
14. The most common mediastinal masses are:	
A. Thymomas.	
B. Neurogenic tumours.	
C. Pheochromocytomas.	
D. Germ cell tumours.	
Correct answer: B.	
15. Masses in the anterior portion of the mediastinum can include:	
A. Thymoma.	
B. Lymphoma.	
C. Pheochromocytoma.	
D. All of the above.	
Correct answer: D.	
16. The most common primary anterior mediastinal tumor (20 %) in adults is:	
A. Lymphoma.	
B. Thymoma.	
C. Teratoma.	
D. Neurogenic tumour.	

- 17. As a whole, mediastinal tumours are:
- A. Very rare.
- B. Very often.

Correct answer: A.

- 18. In the front of the mediastinum, tumours can be caused by:
- A. Lymphoma, including Hodgkin's disease and non-Hodgkin's lymphoma.
- B. Thymoma and thymic cyst (a tumour of the thymus).
- C. Thyroid mass mediastinal (generally a benign growth, but it can sometimes be cancerous).
- D. All of the above.

Correct answer: D.

- 19. In the middle of the mediastinum, tumours can be caused by the following, except:
- A. Bronchogenic cyst (a benign growth that starts in the respiratory system).
- B. Lymphadenopathy mediastinal, or enlargement of the lymph nodes.
- C. Lymphoma, including Hodgkin's disease and non-Hodgkin's lymphoma.
- D. Pericardial cyst (a benign growth on the heart lining).

Correct answer: C.

- 20. In the middle of the mediastinum, tumours can be caused by the following, except:
- A. Thyroid mass mediastinal.
- B. Tracheal tumors (usually benign growths).
- C. Vascular complications, such as swelling of the aorta.
- D. Thymoma and thymic cyst (a tumour of the thymus).

Correct answer: D.

- 21. In the back of the mediastinum, tumours can be caused by the following, except:
- A. Thyroid mass mediastinal.
- B. Extramedullary haematopoiesis (rare growths that start in the bone marrow and are related to severe anaemia).
- C. Lymphadenopathy mediastinal (enlarged lymph nodes).
- D. Neuroenteric cyst mediastinal (a rare growth involving both the nerves and the gastrointestinal system).

- 22. In the back of the mediastinum, tumours can be caused by the following, except:
- A. Neurogenic neoplasm mediastinal (cancerous cells of the nerves).
- B. Thyroid mass mediastinal (generally a benign growth, but it can sometimes be cancerous).
- C. Lymphadenopathy mediastinal (enlarged lymph nodes).

D. Neuroenteric cyst mediastinal (a rare growth involving both the nerves and the gastrointestinal
system).
Correct answer: B.
23. What complications are associated with mediastinal tumours?
A. Tumors can invade the heart.
B. Tumors can invade the vessels of the heart.
C. Tumors can invade the spinal column.
D. All of the above.
Correct answer: D.
24. Radiation therapy of mediastinal tumours may cause changes in the skin, like:
A. Dryness.
B. Itching.
C. Peeling.
D. All of the above.
Correct answer: D.
25. Treatment involving chemotherapy and radiation can have serious side effects, such as:
A. Changes in appetite.
B. Bleeding problems, anaemia.
C. Constipation, diarrhea.
D. All of the above.
Correct answer: D.
26. Approximately 70 % of neurogenic neoplasms are:
A. Benign.
B. Malignant.
Correct answer: A.
27. Mediastinoscopy with biopsy allows doctors to accurately diagnose 80 to 90 % of mediastinal
tumors, and 95 to 100 % of anterior mediastinal tumors. Is it true?
A. Yes.
B. No.
Correct answer: A.
28. In adults, only approximately 1–2 % of neurogenic tumors are:
A. Benign.
B. Malignant.
Correct answer: B.

- 29. Only approximately 2 % of pheochromocytomas occur in the chest. Approximately 90 % of pheochromocytomas occur in the:
- A. Thyroid gland.
- B. Adrenal medulla.
- C. Stomach.
- D. Brain.

Correct answer: B.

- 30. Most anterior mediastinal tumours are bronchogenic cyst. Is it true?
- A. Yes.
- B. No.

Correct answer: B.

Skin

Regional Lymph Nodes

The regional lymph nodes are those appropriate to the site of the primary tumour.

Unilateral Tumours:

- head, neck: ipsilateral preauricular, submandibular, cervical, and supraclavicular lymph nodes;
- thorax: ipsilateral axillary lymph nodes;
- upper limb: ipsilateral epitrochlear and axillary lymph nodes;
- abdomen, loins, and buttocks: ipsilateral inguinal lymph nodes;
- lower limb: ipsilateral popliteal and inguinal lymph nodes;
- anal margin and perianal skin: ipsilateral inguinal lymph nodes.

TNM Clinical Classification

T – Primary Tumour:

TX – primary tumour cannot be assessed;

T0 – no evidence of primary tumour;

Tis – carcinoma in situ;

T1 – tumour 2 cm or less in greatest dimension;

T2 – tumour more than 2 cm in greatest dimension;

T3 – tumour with invasion of deep structures, e. g., muscle, bone, cartilage, jaws, and orbit;

T4 – tumour with direct or perineural invasion of skull base or axial skeleton.

N – Regional Lymph Nodes:

NX – regional lymph nodes cannot be assessed;

N0 – no regional lymph node metastasis;

N1 – metastasis in a single lymph node, 3 cm or less in greatest dimension;

N2 – metastasis in a single lymph node, more than 3 cm but not more than 6 cm in greatest dimension, or in multiple lymph nodes, none more than 6 cm in greatest dimension;

N3 – metastasis in a lymph node, more than 6 cm in greatest dimension.

M – Distant Metastasis:

M0 – no distant metastasis:

M1 – distant metastasis.

Table 9 – Stage Grouping

Stage 0	Tis	N0	M0
Stage I	T1	N0	M0
Stage II	T2	N0	M0
Stage III	T3	N0	M0
	T1, T2, T3	N1	M0
Stage IV	T1, T2, T3	N2, N3	M0
	T4	Any N	M0
	Any T	Any N	M1

TNM Clinical Classification of Melanoma

T – Primary Tumour:

TX – primary tumour cannot be assessed;

T0 – no evidence of primary tumour;

Tis – melanoma in situ (Clark Level I) (atypical melanocytic hyperplasia, severe melanocytic dysplasia, not an invasive malignant lesion);

T1 – tumour 1 mm or less in thickness;

T1a – clark level II or III, without ulceration;

T1b – clark Level IV or V, or with ulceration;

T2 – tumour more than 1 mm but not more than 2 mm in thickness;

T2a – without ulceration;

T2b – with ulceration;

T3 – tumour more than 2 mm but not more than 4 mm in thickness;

T3a – without ulceration;

T3b – with ulceration;

T4 – tumour more than 4 mm in thickness;

T4a – without ulceration;

T4b – with ulceration.

N – Regional Lymph Nodes:

NX – regional lymph nodes cannot be assessed;

N0 – no regional lymph node metastasis;

N1 – metastasis in one regional lymph node;

N1a – only microscopic metastasis (clinically occult);

N1b – macroscopic metastasis (clinically apparent);

N2 – metastasis in two or three regional lymph nodes or satellite(s) or in-transit metastasis;

N2a – only microscopic nodal metastasis;

N2b – macroscopic nodal metastasis;

N2c – satellite(s) or in-transit metastasis without regional nodal metastasis;

N3 – metastasis in four or more regional lymph nodes, or matted metastatic regional lymph nodes, or satellite or in-transit metastasis with metastasis in regional lymph node(s).

Note. Satellites are tumour nests or nodules (macro- or microscopic) within 2 cm of the primary tumour. In-transit metastasis involves skin or subcutaneous tissue more than 2 cm from the primary tumour but not beyond the regional lymph nodes

M – Distant Metastasis:

M0 – no distant metastasis;

M1 – distant metastasis;

M1a – skin, subcutaneous tissue or lymph node(s) beyond the regional lymph nodes;

M1b – lung.

Table 10 – Stage Grouping of Melanoma

Stage 0	Tis	N0	M0
Stage I	T1	N0	M0
Stage IA	T1a	N0	M0
Stage IB	T1b	N0	M0
	T2a	N0	M0
Stage IIA	T2b	N0	M0
	T3a	N0	M0
Stage IIB	T3b	N0	M0
	T4a	N0	M0
Stage IIC	T4b	N0	M0

Continuation of the table 10

Stage III	Any T	N1, N2, N3	M0
Stage IIIA	T1a-4a	N1a, 2a	M0
Stage IIIB	T1a–4a	N1b, 2b, 2c	M0
	T1b-4b	N1a, 2a, 2c	M0
Stage IIIC	T1b-4b	N1b, 2b	M0
	Any T	N3	M0
Stage IV	Any T	Any N	M1

Tests

- 1. Typical skin cancer presentations are following, except:
- A. Basal cell carcinomas.
- B. Squamous cell carcinomas.
- C. Melanoma.
- D. Lentigo maligna.

Correct answer: D.

- 2. What does the rule ABCD mean?
- A. Asymmetry.
- B. Border.
- C. Color.
- D. Diameter.
- E. All of the above.

Correct answer: E.

- 3. Potential signs of melanoma in a mole include the following, except:
- A. A sore that does not heal.
- B. Pigment, redness or swelling that spreads outside the border of a spot to the surrounding skin.
- C. Jaundice.
- D. Itchiness, tenderness or pain.

Correct answer: C.

- 4. Prevention is of two main types (two answers):
- A. Primary.
- B. Secondary.
- C. Urgent.
- D. Deferred.

Correct answers: A, B.

5. Risk factors of skin cancer:
A. Personal history.
B. The previous diagnosis of melanoma.
C. Skin type, eye colour, hair colour.
D. All of the above.
Correct answer: D.
6. Mortality from Basal cell carcinoma is:
A. Very rare.
B. Very often.
C. Sometimes.
Correct answer: A.
7. Morphological types of melanoma include:
A. Superficial spreading.
B. Nodular.
C. Acral lentiginous.
D. All of the above.
Correct answer: D.
8. Melanoma may involve the keratinised skin of the sun-exposed, as well as occasionally the non-
exposed regions of the body, except:
A. Skin of the face.
B. Mouth.
C. Nasal cavities.
D. Ear canal.
Correct answer: B.
9. Mortality from melanoma is:
A. Very rare.
B. Very often.
C. Sometimes.
Correct answer: B.
10. What are the risk factors for skin cancer?
A. Ultraviolet light exposure.
B. A chronically suppressed immune system.
C. Exposure to ionizing radiation.
D. All of the above.

Correct answer: D.

- 11. The most common cancer in humans is:
- A. Basal cell carcinomas.
- B. Squamous cell carcinomas.
- C. Melanoma.
- D. Lentigo maligna.

Correct answer: A.

- 12. Signs and symptoms of basal cell carcinomas include the following, except:
- A. Appearance of a shiny pink, red, pearly, or translucent bump.
- B. Pink skin growths or lesions with raised borders that are crusted in the centre.
- C. Pale patch of skin.
- D. Raised reddish patch of skin that may crust or itch, but is usually not painful.

Correct answer: C.

- 13. Signs and symptoms of basal cell carcinomas include the following, except:
- A. Pink skin growths or lesions with raised borders that are crusted in the centre.
- B. Raised reddish patch of skin that may crust or itch, but is usually not painful.
- C. Enlarged lymph nodes.
- D. A white, yellow, or waxy area with a poorly defined border that may resemble a scar.

Correct answer: C.

- 14. Signs and symptoms of squamous cell carcinomas include the following, except:
- A. Persistent, scaly red patches with irregular borders that may bleed easily.
- B. Pink skin growths or lesions with raised borders that are crusted in the centre.
- C. Open sore that does not go away for weeks.
- D. A raised growth with a rough surface that is indented in the middle.

Correct answer: C.

- 15. What are the most common sites where skin cancer develops?
- A. Face and nose.
- B. Ears.
- C. Back of the neck.
- D. All of the above.

- 16. Most moles become skin cancer. Is it true?
- A. Yes.
- B. No.

Correct answer: B. 17. Skin cancer is the most common cancer in humans. Is it true? A. Yes. B. No. Correct answer: A. 18. Who is most at risk for skin cancer? A. Men. B. Women. C. Teens. D. Babies. Correct answer: A. 19. Most people diagnosed with skin cancer are between ages: A. 25–35. B. 35–45. C. 45-55. D. 55-65. Correct answer: C. 20. Which country has the highest rates of skin cancer? A. United States of America. B. Switzerland. C. Canada. D. Australia. Correct answer: D. 21. Stage I skin cancer means: A. The cancer cells have grown deeper into the skin, but have not spread to the lymph nodes or other parts of the body. B. The cancer cells have grown deeper into the skin, or have more high-risk features, but have not spread to the lymph nodes or beyond. C. The cancer cells have spread to nearby lymph nodes, but not to distant organs.

Correct answer: A.

22. Stage II skin cancer means:

the liver, lungs or brain or distant lymph nodes and areas of the skin.

D. The cancer cells have spread beyond the skin and regional lymph nodes to distant organs such as

A. The cancer cells have grown deeper into the skin, but have not spread to the lymph nodes or other parts of the body.

B. The cancer cells have grown deeper into the skin, or have more high-risk features, but have not spread to the lymph nodes or beyond.

C. The cancer cells have spread to nearby lymph nodes, but not to distant organs.

D. The cancer cells have spread beyond the skin and regional lymph nodes to distant organs such as the liver, lungs or brain or distant lymph nodes and areas of the skin.

Correct answer: B.

23. Stage III skin cancer means:

A. The cancer cells have grown deeper into the skin, but have not spread to the lymph nodes or other parts of the body.

B. The cancer cells have grown deeper into the skin, or have more high-risk features, but have not spread to the lymph nodes or beyond.

C. The cancer cells have spread to nearby lymph nodes, but not to distant organs.

D. The cancer cells have spread beyond the skin and regional lymph nodes to distant organs such as the liver, lungs or brain or distant lymph nodes and areas of the skin.

Correct answer: C.

24. Stage IV skin cancer means:

A. The cancer cells have grown deeper into the skin, but have not spread to the lymph nodes or other parts of the body.

B. The cancer cells have grown deeper into the skin, or have more high-risk features, but have not spread to the lymph nodes or beyond.

C. The cancer cells have spread to nearby lymph nodes, but not to distant organs.

D. The cancer cells have spread beyond the skin and regional lymph nodes to distant organs such as the liver, lungs or brain or distant lymph nodes and areas of the skin.

Correct answer: D.

25. Melanoma is divided into the following types:

A. Lentigo maligna, acral lentiginous melanoma.

B. Lentigo maligna melanoma.

C. Superficial spreading melanoma.

D. All of the above.

Correct answer: D

26. Uveal melanoma is a cancer (melanoma) of the eye involving the:

A. Iris.

B. Ciliary body. C. Choroid. D. All of the above. Correct answer: D.

- 27. Melanoma that has metastasised is treated with:
- A. Dacarbizine.
- B. Interleukin-2.
- C. Pembrolizumab.
- D. All of the above.

Correct answer: D.

- 28. Melanoma signs include the following, except:
- A. A large brownish spot with darker speckles.
- B. A mole that changes in colour, size or that bleeds.
- C. A small lesion with an irregular border and portions that appear red, white, blue or blue-black.
- D. Appearance of a shiny pink, red, pearly, or translucent bump.

Correct answer: D.

- 29. Less common types of skin cancer include:
- A. Kaposi sarcoma.
- B. Merkel cell carcinoma.
- C. Sebaceous gland carcinoma.
- D. All of the above.

Correct answer: D.

- 30. Factors that may increase risk of skin cancer include the following, except:
- A. Black skin.
- B. Fair skin.
- C. A history of sunburns.
- D. A family history of skin cancer.

Correct answer: A.

Brest Tumour

Regional Lymph Nodes

The regional lymph nodes are:

- 1. Axillary (ipsilateral): interpectoral (Rotter) nodes and lymph nodes along the axillary vein and its tributaries, which may be divided into the following levels:
 - Level I (low-axilla): lymph nodes lateral to the lateral border of pectoralis minor muscle;

- Level II (mid-axilla): lymph nodes between the medial and lateral borders of the pectoralis
 minor muscle and the interpectoral (Rotter) lymph nodes;
- Level III (apical axilla): apical lymph nodes and those medial to the medial margin of the pectoralis minor muscle, excluding those designated as subclavicular or infraclavicular.

Note. Intramammary lymph nodes are coded as axillary lymph nodes Level I

- 2. Infraclavicular/subclavicular (ipsilateral).
- 3. Internal mammary (ipsilateral): lymph nodes in the intercostal spaces along the edge of the sternum in the endothoracic fascia.
 - 4. Supraclavicular (ipsilateral).

Note. Any other lymph node metastasis is coded as a distant metastasis (M1), including cervical or contralateral internal mammary lymph nodes

TNM Clinical Classification

T – Primary Tumour:

TX – primary tumour cannot be assessed;

T0 – no evidence of primary tumour;

Tis – carcinoma in situ;

Tis (DCIS) – ductal carcinoma in situ;

Tis (LCIS) – lobular carcinoma in situ;

Tis (Paget) – Paget disease of the nipple not associated with invasive carcinoma and/or carcinoma in situ (DCIS and/or LCIS) in the underlying breast parenchyma. Carcinomas in the breast parenchyma associated with Paget disease are categorized based on the size and characteristics of the parenchymal disease, although the presence of Paget disease should still be noted;

T1 – tumour 2 cm or less in greatest dimension;

T1mi – microinvasion 0.1 cm or less in greatest dimension.

Note. Microinvasion is the extension of cancer cells beyond the basement membrane into the adjacent tissues with no focus more than 0.1 cm in greatest dimension. When there are multiple foci of microinvasion, the size of only the largest focus is used to classify the microinvasion. (Do not use the sum of all individual foci.) The presence of multiple foci of microinvasion should be noted, as it is with multiple larger invasive carcinomas

T1a – more than 0.1 cm but not more than 0.5 cm in greatest dimension;

T1b – more than 0.5 cm but not more than 1 cm in greatest dimension;

T1c – more than 1 cm but not more than 2 cm in greatest dimension;

T2 – tumour more than 2 cm but not more than 5 cm in greatest dimension;

- T3 tumour more than 5 cm in greatest dimension;
- T4 tumour of any size with direct extension to chest wall and/or to skin (ulceration or skin nodules).

Note. Invasion of the dermis alone does not qualify as T4. Chest wall includes ribs, intercostal muscles, and serratus anterior muscle but not pectoral muscle

- T4a extension to chest wall (does not include pectoralis muscle invasion only);
- T4b ulceration, ipsilateral satellite skin nodules, or skin oedema (including peau d'orange);
 - T4c both 4a and 4b, above;
 - T4d inflammatory carcinoma.

Note. Inflammatory carcinoma of the breast is characterized by diffuse, brawny induration of the skin with an erysipeloid edge, usually with no underlying mass. If the skin biopsy is negative and there is no localized measurable primary cancer, the T category is pTX when pathologically staging a clinical inflammatory carcinoma (T4d). Dimpling of the skin, nipple retraction, or other skin changes, except those in T4b and T4d, may occur in T1, T2, or T3 without affecting the classification

N – Regional Lymph Nodes:

- NX regional lymph nodes cannot be assessed (e. g., previously removed);
- N0 no regional lymph node metastasis;
- N1 metastasis in movable ipsilateral Level I, II axillary lymph node(s);
- N2 metastasis in ipsilateral Level I, II axillary lymph node(s) that are clinically fixed or matted; or in clinically detected* ipsilateral internal mammary lymph node(s) in the absence of clinically evident axillary lymph node metastasis;
- N2a metastasis in axillary lymph node(s) fixed to one another (matted) or to other structures;
- N2b metastasis only in clinically detected* internal mammary lymph node(s) and in the absence of clinically detected axillary lymph node metastasis;
- N3 metastasis in ipsilateral infraclavicular (Level III axillary) lymph node(s) with or without Level I, II axillary lymph node involvement; or in clinically detected* ipsilateral internal mammary lymph node(s) with clinically evident Level I, II axillary lymph node metastasis; or metastasis in ipsilateral supraclavicular lymph node(s) with or without axillary or internal mammary lymph node involvement;
 - N3a metastasis in infraclavicular lymph node(s);
 - N3b metastasis in internal mammary and axillary lymph nodes;
 - N3c metastasis in supraclavicular lymph node(s).

Note. *Clinically detected is defined as detected by clinical examination or by imaging studies (excluding lymphoscintigraphy) and having characteristics highly suspicious for malignancy or a presumed pathological macrometastasis based on fine-needle aspiration biopsy with cytological examination. Confirmation of clinically detected metastatic disease by fine-needle aspiration without excision biopsy is designated with an (f) suffix, e. g., cN3a(f)

Excisional biopsy of a lymph node or biopsy of a sentinel node, in the absence of assignment of a pT, is classified as a clinical N, e. g., cN1. Pathological classification (pN) is used for excision or sentinel lymph node biopsy only in conjunction with a pathological T assignment.

M – Distant Metastasis:

M0 No distant metastasis;

M1 Distant metastasis.

Table 11 – Stage Grouping

Stage 0	Tis	N0	M0
Stage IA	T1*	N0	M0
Stage IB	T0, T1*	N1mi	M0
Stage IIA	T0, T1*	N1	M0
	T2	N0	M0
Stage IIB	T2	N1	M0
	T3	N0	M0
Stage IIIA	T0, T1*, T2	N2	M0
	Т3	N1, N2	M0
Stage IIIB	T4	N0, N1, N2	M0
Stage IIIC	Any T	N3	M0
Stage IV	Any T	Any N	M1

Tests

- 1. Clinical symptoms of breast cancer may include the following, except:
- A. Change in breast size or shape.
- B. Skin dimpling or skin changes (e. g., thickening, swelling, or redness).
- C. Recent nipple inversion or skin change or other nipple abnormalities (e. g., ulceration, retraction, or spontaneous bloody discharge).
- D. Vaginal dryness.

2. The clinician should be alert to symptoms of metastatic spread that may include the following, except:
A. Breathing difficulties.
B. Bone pain.
C. Jaundice.
D. Change in breast size or shape.

Correct answer: D.

- 3. Factors that increase the risk of breast cancer include the following, except:
- A. Being female.
- B. Increasing age.
- C. Breast ultrasound.
- D. A family history of breast cancer.

Correct answer: C.

- 4. Tests and procedures used to diagnose breast cancer include:
- A. Mammogram.
- B. Breast ultrasound.
- C. Removing a sample of breast cells for testing (biopsy.
- D. All of the above.

Correct answer: D.

- 5. Tests and procedures used to stage breast cancer may include:
- A. All answers are correct.
- B. Blood tests, such as a complete blood count.
- C. Mammogram of the other breast to look for signs of cancer.
- D. Breast MRI.

Correct answer: A.

- 6. Side effects of radiation therapy include the following, except:
- A. Fatigue.
- B. Bone pain.
- C. Redness.
- D. Sunburn-like rash.

- 7. Treatments that can be used in hormone therapy include the following, except:
- A. Targeted drugs.
- B. Medications that block hormones from attaching to cancer cells.

- C. Medications that stop the body from making estrogen after menopause.
- D. A drug that targets estrogen receptors for destruction.

Correct answer: A.

- 8. Possible side effects of tamoxifen include the following, except:
- A. Hot flashes.
- B. Stomach pain.
- C. Night sweats.
- D. Vaginal dryness.

Correct answer: B.

- 9. Drugs blocking the action of an enzyme that converts androgens in the body into estrogen are called:
- A. Anastrozole (Arimidex).
- B. Letrozole (Femara).
- C. Exemestane (Aromasin).
- D. Tamoxifen.

Correct answer: C.

- 10. Targeted drugs used to treat breast cancer include:
- A. Trastuzumab (Herceptin).
- B. Letrozole (Femara).
- C. Tamoxifen.
- D. Bevacizumab (Avastin).

Correct answer: A.

- 11. Which of the following are true of breast cancer?
- A. The life time risk for a woman of developing breast cancer is 1/9.
- B. For most women a specific cause of their breast cancer is known.
- C. Prognosis is worse for affluent women.
- D. Incidence of breast cancer is decreasing.

Correct answer: A.

- 12. Risk factors for breast cancer include?
- A. Young age.
- B. Young age at menopause.
- C. Young age at first birth.
- D. Young age at menarche.

- 13. Are the following statements regarding screening for breast cancer correct?
- A. Mammography is offered to all women between the ages of 50 and 75 years.

- B. Studies have shown an approximate 30 % reduction in mortality with screening using mammography.
- C. Most radiographically suspicious lesions are subsequently confirmed as malignant.
- D. Mammography is less sensitive in postmenopausal women.

Correct answer: B.

- 14. Which of the following is not necessary when a patient first presents with a breast lump?
- A. Fine needle aspiration (FNA).
- B. Chest x-ray.
- C. Examination of axillary lymph nodes.
- D. Examination of breasts with patient supine.

Correct answer: B.

- 15. Which of the following are good prognostic factors in breast cancer?
- A. Oestrogen receptor positivity.
- B. Grade III tumour.
- C. HER 2 receptor overexpression.
- D. Lymph node involvement.

Correct answer: A.

- 16. Which of the following statements is true regarding adjuvant treatment for early breast cancer?
- A. Radiotherapy is indicated after breast conserving surgery only if >4 nodes are positive or tumour is close to the resection margin.
- B. Aromatase inhibitors are replacing tamoxifen in premenopausal women due to better outcomes and greater tolerability.
- C. Combination chemotherapy reduces recurrence and improves survival in selected patient groups.
- D. No survival benefit has been demonstrated with the use of Trastuzumab (Herceptin) in the adjuvant setting.

Correct answer: C.

- 17. In treatment of metastatic breast cancer:
- A. Chemotherapy is superior to endocrine therapy.
- B. Bisphosphonates are used to control hypocalcaemia.
- C. Responses to endocrine therapy tend to occur within 2 months of starting treatment.
- D. Trastuzumab (herceptin) in combination with chemotherapy improves survival in patients who have tumours that overexpress HER 2.

- 18. Which of the following statements is true of breast cancer treatment?
- A. Mastectomy is superior to breast conservation surgery.

- B. Chemotherapy can be used safely in the first trimester of pregnancy.
- C. Radiotherapy should be given to all male breast cancer patients after mastectomy.
- D. Paget's disease of the nipple should be treated with wide local excision.

Correct answer: C.

- 19. Which of the following is a rare site of breast cancer metastases?
- A. Brain.
- B. Kidney.
- C. Liver.
- D. Bone.

Correct answer: B.

- 20. Which of the following statements is true of palliative treatment of metastatic breast cancer?
- A. Hypercalcaemia should be treated with increased oral fluids and oral bisphosphonates.
- B. Increased back pain and 'weak legs' requires prompt investigation.
- C. Bisphosphonates are used in treatment of liver metastases.
- D. Neuropathic pain usually responds quickly to opioid analgesics.

Correct answer: B.

- 21. Breast cancer is more common in:
- A. Younger women.
- B. Older women.
- C). Adolescents.

Correct answer: B.

- 22. In situ breast cancer refers to
- A. Cancer that has spread throughout the body.
- B. Cancer that has spread to local lymph nodes.
- C. Cancer that appears in only one place in the body.
- D. Cancer that has spread throughout the chest.

Correct answer: C.

- 23. If cancer has metastasized, that means that it
- A. Has disappeared from the body.
- B. Exists only in the place where it started.
- C. Has spread to other parts of the body.
- D. All of the above.

Correct answer: C.

24. Which of the following are possible symptoms of breast cancer?

- A. A change in the size or shape of the breast.
- B. Nipple discharge or tenderness.
- C. Ridges or pitting of the breast.
- D. All of the above.

Correct answer: D.

- 25. Early signs of breast cancer
- A. Are often painful.
- B. Are often visible to the naked eye.
- C. Don't cause any symptoms.
- D. All of the above.

Correct answer: C.

- 26. What percentage of mammogram results is abnormal?
- A. 5 to 10 percent.
- B. 20 to 25 percent.
- C. 1 to 2 percent.
- D. 25 to 50 percent.

Correct answer: A.

- 27. Stage I breast cancer is:
- A. Early stage breast cancer.
- B. Late stage breast cancer.
- C. Locally advanced breast cancer.

Correct answer: A.

- 28. Stage III breast cancer is:
- A. Early stage breast cancer.
- B. Late stage breast cancer.
- C. Locally advanced breast cancer.

Correct answer: C.

- 29. Stage IV breast cancer is:
- A. Early stage breast cancer.
- B. Late stage breast cancer.
- C. Locally advanced breast cancer.

- 30. Which of the following is a local treatment for breast cancer?
- A. Surgery
- B. Hormone therapy
- C. Biological therapy

D. Chemotherapy

Correct answer: A.

Cervix Uteri

Regional Lymph Nodes

The regional lymph nodes are the paracervical, parametrial, hypogastric (internal iliac, obturator), common and external iliac, presacral, and lateral sacral nodes. Para-aortic nodes are not regional.

Table 12 – Stage Grouping

TNM	FIGO	Description	
Categories	Stages		
1	2	3	
TX		Primary tumour cannot be assessed	
T0		No evidence of primary tumour	
Tis	1	Carcinoma in situ (preinvasive carcinoma)	
T1	I	Tumour confined to the cervix (extension to corpus should be disregarded)	
T1a ²	IA	Invasive carcinoma diagnosed only by microscopy. Stromal invasion with an invasion and a horizontal spread of 7.0 mm or less ³	
T1a1	IA ¹	Measured stromal 3.0 mm or less in depth and 7.0 mm or less in horizontal spread	
T1a ²	IA ²	Measured stromal invasion more than 3.0 mm and not more than 5.0 mm with a horizontal spread of 7.0 mm or less	

Note. The depth of invasion should be taken from the base of the epithelium, either surface or glandular, from which it originates. The depth of invasion is defined as the measurement of the tumour from the epithelial – stromal junction of the adjacent most superficial papillae to the deepest point of invasion. Vascular space involvement, venous or lymphatic, does not affect classification

Continuation of the table 12

1	2	3	
T1b	IB	Clinically visible lesion confined to the cervix or microscopic lesion greater than T1a/IA ²	
T1b1	IB¹	Clinically visible lesion 4.0 cm or less in greatest dimension	
T1b ²	IB ²	Clinically visible lesion more than 4.0 cm in greatest dimension	
T2	II	Tumour invades beyond uterus but not to pelvic wall or to lower third of vagina	
T2a	IIA	Tumour without parametrial invasion	
T2a ¹	IIA ¹	Clinically visible lesion 4.0 cm or less in greatest dimension	
T2a ²	IIA ²	Clinically visible lesion more than 4.0 cm in greatest dimension	
T2b	IIB	Tumour with parametrial invasion	
Т3	III	Tumour extends to pelvic wall, involves lower third of the vagina, causes hydronephrosis or non-functioning kidney	
T3a	IIIA	Tumour involves lower third of vagina	
T3b	IIIB	Tumour extends to pelvic wall, causes hydronephrosis or nonfunctioning kidney	
T4	IVA	Tumour invades mucosa of the bladder or rectum, or extends beyond true pelvis	

Notes:

- 1. FIGO no longer includes Stage 0 (Tis).
- 2. All macroscopically visible lesions even with superficial invasion are T1b/IB.
- 3. Vascular space involvement, venous or lymphatic, does not affect classification

N – Regional Lymph Nodes:

- NX regional lymph nodes cannot be assessed;
- N0 no regional lymph node metastasis;
- N1 regional lymph node metastasis.

M – Distant Metastasis:

- M0 no distant metastasis;
- M1 distant metastasis (includes inguinal lymphnodes and intraperitoneal disease except metastasis to pelvic serosa). It excludes metastasis to vagina, pelvic serosa, and adnexa.

Tests

- 1. Signs and symptoms of more-advanced cervical cancer include:
- A. Vaginal bleeding after intercourse, between periods or after menopause.
- B. Watery, bloody vaginal discharge that may be heavy and have a foul odor.
- C. Pelvic pain or pain during intercourse.
- D. All of the above.

- 2. The main type of cervical cancer is:
- A. Squamous cell carcinoma.
- B. Lymphoma.
- C. Leiomyosarcoma.
- D. Adenocarcinoma.

Correct answer: A.

- 3. Risk factors for cervical cancer include the following, except:
- A. Many sexual partners, early sexual activity.
- B. Other sexually transmitted infections (STIs).
- C. A weak immune system, smoking.
- D. Past Epstein-Barr infection.

Correct answer: D.

- 4. Screening tests include:
- A. High-sensitivity FOBT (stool test).
- B. Pap test.
- C. HPV DNA test.
- D. All of the above.

Correct answer: D.

- 5. Stage I of cervical cancer includes:
- A. Cancer is confined to the cervix.
- B. Cancer is present in the cervix and upper portion of the vagina.
- C. Cancer has moved to the lower portion of the vagina or internally to the pelvic side wall.
- D. Cancer has spread to nearby organs, such as the bladder or rectum, or it has spread to other areas of the body, such as the lungs, liver or bones.

Correct answer: A.

- 6. Stage II of cervical cancer includes:
- A. Cancer is confined to the cervix.
- B. Cancer is present in the cervix and upper portion of the vagina.
- C. Cancer has moved to the lower portion of the vagina or internally to the pelvic side wall.
- D. Cancer has spread to nearby organs, such as the bladder or rectum, or it has spread to other areas of the body, such as the lungs, liver or bones.

- 7. Stage III of cervical cancer includes:
- A. Cancer is confined to the cervix.

- B. Cancer is present in the cervix and upper portion of the vagina.
- C. Cancer has moved to the lower portion of the vagina or internally to the pelvic side wall.
- D. Cancer has spread to nearby organs, such as the bladder or rectum, or it has spread to other areas of the body, such as the lungs, liver or bones.

Correct answer: C.

- 8. Stage IV of cervical cancer includes:
- A. Cancer is confined to the cervix.
- B. Cancer is present in the cervix and upper portion of the vagina.
- C. Cancer has moved to the lower portion of the vagina or internally to the pelvic side wall.
- D. Cancer has spread to nearby organs, such as the bladder or rectum, or it has spread to other areas of the body, such as the lungs, liver or bones.

Correct answer: D

- 9. What is the surgery treatment of cervical cancer?
- A. Simple hysterectomy.
- B. Radical hysterectomy.
- C. Complex hysterectomy.
- D. All of the above.

Correct answer: D.

- 10. To reduce the risk of cervical cancer:
- A. Get vaccinated against HPV.
- B. Have routine Pap tests.
- C. Practice safe sex, don't smoke.
- D. All of the above.

Correct answer: D.

- 11. Cervical cancer is one of the most common cancers in women worldwide. Is it true?
- A. Yes.
- B. No.

- 12. Symptoms of cervical cancer may include the following, except:
- A. Bleeding from the vagina that is not normal, such as bleeding between menstrual periods, after sex, or after menopause.
- B. Pain in the lower belly or pelvis.
- C. Pain during sex.
- D. Nausea.

Correct answer: A.

13. Symptoms of cervical cancer may include the following, except:

A. Bleeding from the vagina that is not normal, such as bleeding between menstrual periods, after sex, or after menopause.

B. Pain in the lower belly or pelvis.

C. Vomiting.

D. Vaginal discharge that isn't normal.

Correct answer: A.

14. The treatment for most stages of cervical cancer includes:

A. Surgery, such as a hysterectomy and removal of pelvic lymph nodes with or without removal of both ovaries and fallopian tubes.

B. Chemotherapy.

C. Radiation therapy.

D. All of the above.

Correct answer: D.

15. Can cervical cancer be prevented?

A. Yes.

B. No.

Correct answer: A.

16. Human papillomavirus (HPV) infection appears to be involved in the development of more than:

A. 90 % of cases.

B. 80 % of cases.

C. 70 % of cases.

D. 60 % of cases.

Correct answer: A.

17. About 90 % of cervical cancer cases are:

A. Adenocarcinoma.

B. Squamous cell carcinomas.

C. Lymphoma.

D. Leiomyosarcoma.

Correct answer: B.

18. About 10 % of cervical cancer cases are:

A. Adenocarcinoma.

B. Squamous cell carcinomas.
C. Lymphoma.
D. Leiomyosarcoma.
Correct answer: A.
19. Methods of prevention include:
A. Use of condoms.
B. Regular Pap smears.
C. Use HPV vaccines.
D. All of the above.
Correct answer: D.
20. Symptoms of advanced cervical cancer may include:
A. Loss of appetite, weight loss.
B. Fatigue, pelvic pain.
C. Back pain, leg pain.
D. All of the above.
Correct answer: D.
21. Symptoms of advanced cervical cancer may include the following, except:
A. Swollen legs, heavy vaginal bleeding.
B. Bone fractures.
C. Vaginal dryness.
D. Leakage of urine or feces from the vagina.
Correct answer: C.
22. What are the types of Human papillomavirus that cause 75 % of cervical cancer cases globally?
A. 31 and 45.
B. 16 and 18.
C. 30 and 42.
D. 13 and 18.
Correct answer: B.
23. What are the types of Human papillomavirus that cause 10 % of cervical cancer cases globally?
A. 31 and 45.
B. 16 and 18.
C. 30 and 42.
D. 13 and 18.
Correct answer: A.

24. What are the risk factors of cervical cancer? A. Smoking. B. Oral contraceptives. C. Multiple pregnancies. D. All of the above. Correct answer: D. 25. Histologic subtypes of invasive cervical carcinoma include the following: A. Squamous cell carcinoma (about 80–85 %). B. Adenocarcinoma (about 15 %). C. Adenosquamous carcinoma. D. All of the above. Correct answer: D. 26. Noncarcinoma malignancies which can rarely occur in the cervix include (two answers): A. Squamous cell carcinoma (about 80–85 %). B. Adenocarcinoma (about 15 %). C. Melanoma. D. Lymphoma. Correct answer: C, D. 27. What are the HPV vaccines that reduce the risk of cancerous or precancerous changes of the cervix? (two answers) A. Gardasil. B. Fluarics. C. Cervarix. D. Vaksigrip. Correct answer: A, C. 28. Which of the following is not true? A. Cervical cancer was noted to be common in female sex workers. B. It was rare in nuns, except for those who had been sexually active before entering the convent. C. It was more common in the second wives of men whose first wives had died from cervical cancer. D. It was rare in African women. Correct answer: D. 29. Pap smear screening began in:

A. 1901.

- B. 1931.
- C. 1941.
- D. 1991.

Correct answer: C.

- 30. What is cervical intraepithelial neoplasia?
- A. Cancer.
- B. Benign tumour.
- C. Precancerous lesions.
- D. All of the above.

Correct answer: C.

Kidney

Regional Lymph Nodes

The regional lymph nodes are the hilar, abdominal para-aortic, and paracaval nodes. Laterality does not affect the N categories.

TNM Clinical Classification

T – Primary Tumour:

- TX primary tumour cannot be assessed;
- T0 no evidence of primary tumour;
- T1 tumour 7 cm or less in greatest dimension, limited to the kidney;
- T1a tumour 4 cm or less;
- T1b tumour more than 4 cm but not more than 7 cm;
- T2 tumour more than 7 cm in greatest dimension, limited to the kidney;
- T2a tumour more than 7 cm but not more than 10 cm;
- T2b tumour more than 10 cm, limited to the kidney;
- T3 tumour extends into major veins or perinephric tissues but not into the ipsilateral adrenal gland and not beyond Gerota fascia;
- T3a tumour grossly extends into the renal vein or its segmental (muscle containing) branches, or tumour invades perirenal and/or renal sinus fat (peripelvic) fat but not beyond Gerota fascia;
- T3b tumour grossly extends into vena cava below diaphragm;
- T3c tumour grossly extends into vena cava above the diaphragm or invades the wall of the vena cava;
- T4 tumour invades beyond Gerota fascia (including contiguous extension into the ipsilateral adrenal gland).

N – Regional Lymph Nodes:

- NX regional lymph nodes cannot be assessed;
- N0 no regional lymph node metastasis;
- N1 metastasis in a single regional lymph node;
- N2 metastasis in more than one regional lymph node.

M – Distant Metastasis:

M0 – no distant metastasis;

M1 – distant metastasis.

Table 13 – Stage Grouping

Stage I	T1	N0	M0
Stage II	T2	N0	M0
Stage III	Т3	N0	M0
	T1, T2, T3	N1	M0
Stage IV	T4	Any N	M0
	Any T	N2	M0
	Any T	Any N	M1

Tests

- 1. In the later stages, kidney cancer signs and symptoms may include:
- A. Blood in urine, which may appear pink, red or cola coloured.
- B. Back pain just below the ribs that doesn't go away.
- C. Weight loss, fatigue.
- D. All of the above.

Correct answer: D.

- 2. Factors that can increase the risk of kidney cancer include the following, except:
- A. Older age.
- B. Smoking.
- C. Low blood pressure.
- D. Obesity.

- 3. Factors that can increase the risk of kidney cancer include the following, except:
- A. Exposure to radon gas.
- B. High blood pressure (hypertension).

- C. People who receive long-term dialysis to treat chronic kidney failure.
- D. Certain inherited syndromes.

Correct answer: A.

- 4. Tests and procedures used to diagnose kidney cancer include:
- A. Blood and urine tests.
- B. Imaging tests.
- C. Removing a sample of kidney tissue (biopsy).
- D. All of the above.

Correct answer: D.

- 5. The stage I of kidney cancer includes:
- A. At this stage, the tumour can be up to 2 3/4 inches (7 centimeters) in diameter. The tumor is confined to the kidney.
- B. A stage II kidney cancer is larger than a stage I tumour, but it's still confined to the kidney.
- C. At this stage, the tumour extends beyond the kidney to the surrounding tissue and may also have spread to a nearby lymph node.
- D. Cancer spreads outside the kidney, to multiple lymph nodes or to distant parts of the body, such as the bones, liver or lungs.

Correct answer: A.

- 6. The stage III of kidney cancer includes:
- A. At this stage, the tumour can be up to 2 3/4 inches (7 centimeters) in diameter. The tumor is confined to the kidney.
- B. At this stage, the cancer is larger than a stage I tumour, but it's still confined to the kidney.
- C. At this stage, the tumour extends beyond the kidney to the surrounding tissue and may also have spread to a nearby lymph node.
- D. Cancer spreads outside the kidney, to multiple lymph nodes or to distant parts of the body, such as the bones, liver or lungs.

Correct answer: C.

- 7. Surgical procedures used to treat kidney cancer include:
- A. Removing the affected kidney (nephrectomy).
- B. Removing the tumour from the kidney (nephron-sparing surgery).
- C. Treatment to freeze cancer cells (cryoablation).
- D. All of the above.

- 8. For some people, surgery isn't an option. In these situations, kidney cancer treatments may include the following, except:
- A. Treatment to freeze cancer cells (cryoablation).
- B. Removing the tumour from the kidney (nephron-sparing surgery).
- C. Treatment to heat cancer cells (radiofrequency ablation).
- D. Removing the affected kidney (nephrectomy).

Correct answer: D.

- 9. Kidney cancer that recurs and kidney cancer that spreads to other parts of the body may not be curable, but may be controlled with treatment. In these situations, treatments may include:
- A. Surgery to remove as much of the kidney tumour as possible.
- B. Drugs that use your immune system to fight cancer (biological therapy).
- C. Treatment that targets specific aspects of your cancer (targeted therapy).
- D. All of the above.

Correct answer: D.

- 10. To reduce the risk of kidney cancer, try to:
- A. Quit smoking.
- B. Maintain a healthy weight.
- C. Control high blood pressure.
- D. All of the above.

Correct answer: D.

- 11. The stage II of kidney cancer includes:
- A. At this stage, the tumour can be up to 2 3/4 inches (7 centimeters) in diameter. The tumor is confined to the kidney.
- B. At this stage, the cancer is larger than a stage I tumour, but it's still confined to the kidney.
- C. At this stage, the tumour extends beyond the kidney to the surrounding tissue and may also have spread to a nearby lymph node.
- D. Cancer spreads outside the kidney, to multiple lymph nodes or to distant parts of the body, such as the bones, liver or lungs.

- 12. The stage IV of kidney cancer includes:
- A. At this stage, the tumour can be up to 2 3/4 inches (7 centimeters) in diameter. The tumor is confined to the kidney.
- B. At this stage, the cancer is larger than a stage I tumour, but it's still confined to the kidney.

- C. At this stage, the tumour extends beyond the kidney to the surrounding tissue and may also have spread to a nearby lymph node.
- D. Cancer spreads outside the kidney, to multiple lymph nodes or to distant parts of the body, such as the bones, liver or lungs.

Correct answer: D

- 13. Kidney cancer occurs most often in people older than age:
- A. 20.
- B. 30.
- C. 40.
- D. 50.

Correct answer: C.

- 14. There are risk factors for kidney cancer, except:
- A. Smoking.
- B. Being female.
- C. Being obese.
- D. Using certain pain medications for a long time.

Correct answer: B.

- 15. There are risk factors for kidney cancer, except:
- A. Having certain genetic conditions, such as von Hippel-Lindau (VHL) disease or inherited papillary renal cell carcinoma.
- B. Having a family history of kidney cancer.
- C. Being exposed to certain chemicals, such as asbestos, cadmium, benzene, organic solvents, or certain herbicides.
- D. Having low blood pressure.

Correct answer: D.

- 16. The risk in blacks is slightly higher than in whites. Is it true?
- A. Yes.
- B. No.

- 17. Kidney cancer that spreads to other parts of your body may cause other symptoms, such as:
- A. Shortness of breath.
- B. Coughing up blood.
- C. Bone pain.
- D. All of the above.

Correct answer: D.

- 18. What is the test used to evaluate the blood supply to the tumour?
- A. Intravenous pyelogram.
- B. Magnetic resonance imaging.
- C. Renal arteriogram.
- D. All of the above.

Correct answer: C.

- 19. What is stage IV of kidney cancer?
- A. Cancer has spread beyond the fatty layer of tissue around the kidney, and it may also be in nearby lymph nodes.
- B. Cancer may have spread to other organs, such as the bowel, pancreas, or lungs.
- C. Cancer has spread beyond Gerota's fascia (including contiguous extension into the ipsilateral adrenal gland).
- D. All of the above.

Correct answer: D.

- 20. What is stage III of kidney cancer?
- A. A tumour that is in the kidney and in at least one nearby lymph node.
- B. A tumour that is in the kidney's main blood vessel and may also be in a nearby lymph node.
- C. A tumour that is in the fatty tissue around the kidney and may also involve nearby lymph nodes.
- D. All of the above.

Correct answer: D.

- 21. What are the main types of surgery for kidney cancer?
- A. Radical nephrectomy removes the kidney, adrenal gland, and surrounding tissue. It also often removes nearby lymph nodes.
- B. Simple nephrectomy.
- C. Partial nephrectomy.
- D. All of the above.

- 22. This procedure is used for patients with smaller tumours (less than 4 cm) or in those patients in which a radical nephrectomy might hurt the other kidney:
- A. Radical nephrectomy removes the kidney, adrenal gland, and surrounding tissue. It also often removes nearby lymph nodes.
- B. Simple nephrectomy.
- C. Partial nephrectomy.

D. All of the above.

Correct answer: C.

23. This therapy uses your immune system to fight cancer by boosting, directing, or restoring your body's natural defenses:

A. Targeted therapy.

B. Biologic therapy.

C. Radiation therapy.

D. Chemotherapy.

Correct answer: B.

24. Examples of biologic therapy for metastatic kidney cancer include:

A. Interferon alpha or interleukin-2.

B. Multikinase inhibitors.

C. Tyrosine kinase inhibitors.

D. Avastin.

Correct answer: A.

25. People who are born with certain inherited syndromes may have an increased risk of kidney cancer, including those who have von:

A. Hippel-Lindau disease.

B. Birt-Hogg-Dube syndrome.

C. Tuberous sclerosis.

D. All of the above.

Correct answer: D.

26. What is the treatment that involves the removal of the kidney, a border of healthy tissue and the adjacent lymph nodes? The adrenal gland also may be removed:

A. Radical nephrectomy.

B. Simple nephrectomy.

C. Partial nephrectomy.

D. All of the above.

Correct answer: A.

27. During this procedure, also called partial nephrectomy, the surgeon removes the tumour and a small margin of healthy tissue that surrounds it:

A. Radical nephrectomy.

B. Simple nephrectomy.

C. Nephron-sparing surgery.

D. All of the above.

Correct answer: C.

- 28. Kidney cancer treatments may include:
- A. Treatment to freeze cancer cells.
- B. Treatment to heat cancer cells.
- C. Targeted therapy.
- D. All of the above.

Correct answer: D.

- 29. This drug therapy can block specific abnormal signals present in kidney cancer cells that allow them to proliferate. These drugs have shown promise in treating kidney cancer that has spread to other areas of the body:
- A. Targeted therapy.
- B. Biologic therapy.
- C. Radiation therapy.
- D. Chemotherapy.

Correct answer: A.

- 30. Targeted therapy drugs can cause side effects, such as a:
- A. Rash.
- B. Diarrhea.
- C. Fatigue.
- D. All of the above.

Correct answer: D.

Hodgkin Lymphoma

Clinical Stages (cS)

Stage I

Involvement of a single lymph node region (I), or localized involvement of a single extralymphatic organ or site (IE).

Stage II

Involvement of two or more lymph node regions on the same side of the diaphragm (II), or localized involvement of a single extralymphatic organ or site and its regional lymph node(s) with or without involvement of other lymph node regions on the same side of the diaphragm (IIE)

Stage III

Involvement of lymph node regions on both sides of the diaphragm (III), which may also be accompanied by localized involvement of an associated extralymphatic organ or site IIIE, or by involvement of the spleen (IIIS), or both IIIES.

Stage IV

Disseminated (multifocal) involvement of one or more extralymphatic organs, with or without associated lymph node involvement; or isolated extralymphatic organ involvement with distant (non-regional) nodal involvement.

Note. The site of Stage IV disease is identified further by specifying sites according to the notations listed above

A and B Classification (Symptoms)

Each stage should be divided into A and B according to the absence or presence of defined general symptoms. These are:

- 1. Unexplained weight loss of more than 10 % of the usual body weight in the 6 months prior to first attendance.
 - 2. Unexplained fever with temperature above 38 °C.
 - 3. Night sweats.

Note. Pruritus alone does not qualify for B classification nor does a short, febrile illness associated with a known infection

Tests

- 1. Hodgkin's lymphoma signs and symptoms may include the following, except:
- A. Painless swelling of lymph nodes in your neck, armpits or groin.
- B. Persistent fatigue, night sweats.
- C. Fever and chills.
- D. Nausea and vomiting.

Correct answer: D.

- 2. Hodgkin's lymphoma signs and symptoms may include:
- A. Unexplained weight loss as much as 10 percent or more of your body weight.
- B. Loss of appetite, itching.
- C. Increased sensitivity to the effects of alcohol or pain in your lymph nodes after drinking alcohol.
- D. All of the above.

- 3. Subtypes of classical Hodgkin's lymphoma include:
- A. Nodular sclerosis Hodgkin's lymphoma, mixed cellularity Hodgkin's lymphoma.
- B. Lymphocyte-depleted Hodgkin's lymphoma.

C. Lymphocyte-rich classical Hodgkin's lymphoma.

D. All of the above.

Correct answer: D.

4. Factors that increase the risk of Hodgkin's lymphoma include the following, except:

A. A family history of lymphoma.

B. Past Epstein-Barr infection.

C. Older age.

D. A weakened immune system.

Correct answer: C.

5. What is the Stage II of Hodgkin's lymphoma?

A. The cancer is limited to one lymph node region or a single organ.

B. The cancer is in two lymph node regions or the cancer has invaded one organ and the nearby lymph nodes. But the cancer is still limited to a section of the body either above or below the diaphragm.

C. The cancer moves to lymph nodes both above and below the diaphragm. Cancer may also be in one portion of tissue or an organ near the lymph node groups or in the spleen.

D. Cancer cells are in several portions of one or more organs and tissues. This stage of Hodgkin's lymphoma affects not only the lymph nodes but also other parts of your body, such as the liver, lungs or bones.

Correct answer: B.

6. What is the Stage III of Hodgkin's lymphoma?

A. The cancer is limited to one lymph node region or a single organ.

B. The cancer is in two lymph node regions or the cancer has invaded one organ and the nearby lymph nodes. But the cancer is still limited to a section of the body either above or below the diaphragm.

C. The cancer moves to lymph nodes both above and below the diaphragm. Cancer may also be in one portion of tissue or an organ near the lymph node groups or in the spleen.

D. Cancer cells are in several portions of one or more organs and tissues. This stage of Hodgkin's lymphoma affects not only the lymph nodes but also other parts of your body, such as the liver, lungs or bones.

Correct answer: C.

7. What is the Stage I of Hodgkin's lymphoma?

A. The cancer is limited to one lymph node region or a single organ.

B. The cancer is in two lymph node regions or the cancer has invaded one organ and the nearby lymph nodes. But the cancer is still limited to a section of the body either above or below the diaphragm.

C. The cancer moves to lymph nodes both above and below the diaphragm. Cancer may also be in one portion of tissue or an organ near the lymph node groups or in the spleen.

D. Cancer cells are in several portions of one or more organs and tissues. This stage of Hodgkin's lymphoma affects not only the lymph nodes but also other parts of your body, such as the liver, lungs or bones.

Correct answer: A.

8. The doctor uses the letters A and B to indicate whether patients are experiencing symptoms of Hodgkin's lymphoma. What does the letter A mean?

A. Patients don't have any significant symptoms as a result of the cancer.

B. Patients may have significant signs and symptoms, such as a persistent fever, unintended weight loss or severe night sweats.

Correct answer: A.

9. What serious long-term complications of chemotherapy can occur?

A. Heart damage.

B. Lung damage.

C. Fertility problems.

D. All of the above.

Correct answer: D.

10. Hodgkin's lymphoma is most often diagnosed in people between the ages (two answers):

A. 15 to 30 years.

B. Older than 55.

C. 10 to 40 years.

D. Older than 75.

Correct answer: A, B.

11. What is the Stage IV of Hodgkin's lymphoma?

A. The cancer is limited to one lymph node region or a single organ.

B. The cancer is in two lymph node regions or the cancer has invaded one organ and the nearby lymph nodes. But the cancer is still limited to a section of the body either above or below the diaphragm.

C. The cancer moves to lymph nodes both above and below the diaphragm. Cancer may also be in one portion of tissue or an organ near the lymph node groups or in the spleen.

D. Cancer cells are in several portions of one or more organs and tissues. This stage of Hodgkin's lymphoma affects not only the lymph nodes but also other parts of your body, such as the liver, lungs or bones.

Correct answer: D.

- 12. The doctor uses the letters A and B to indicate whether patients are experiencing symptoms of Hodgkin's lymphoma. What does the letter B mean?
- A. You don't have any significant symptoms as a result of the cancer.
- B. You may have significant signs and symptoms, such as a persistent fever, unintended weight loss or severe night sweats.

Correct answer: B.

- 13. What is five-year survival rate that the patients have with Hodgkin's lymphoma?
- A. About 85 percent.
- B. About 65 percent.
- C. About 45 percent.
- D. About 25 percent.

Correct answer: A.

- 14. What is ten-year survival rate that the patients have with Hodgkin's lymphoma?
- A. About 91 percent.
- B. About 81 percent.
- C. About 71 percent.
- D. About 61 percent.

Correct answer: B.

- 15. How is Hodgkin's disease diagnosed?
- A. Imaging tests, such as X-rays or CT scans.
- B. Lymph node biopsy.
- C. Blood tests.
- D. All of the above.

Correct answer: D.

- 16. How is Hodgkin's disease treated?
- A. Chemotherapy and radiation therapy.
- B. Surgery and radiation therapy.
- C. Surgery and chemotherapy.
- D. Surgery.

- 17. Radiation to the chest can increase the risk of:A. Breast cancer.B. Lung cancer.
- υ
- C. Heart disease.
- D. All of the above.

Correct answer: D.

- 18. What is one-year survival rate that the patients have with Hodgkin's lymphoma?
- A. About 91 percent.
- B. About 81 percent.
- C. About 71 percent.
- D. About 61 percent.

Correct answer: A.

- 19. What is the role of B lymphocytes in the body?
- A. Help protect the body from germs (bacteria and viruses) by making proteins called antibodies. The antibodies attach to the germs, marking them for destruction by other parts of the immune system.
- B. Directly destroy certain kinds of bacteria or cells infected with viruses or fungi.
- C. Play a role in either boosting or slowing the activity of other immune system cells.
- D. All of the above.

Correct answer: A.

- 20. What is the role of T lymphocytes in the body? (Two answers):
- A. Help protect the body from germs (bacteria and viruses) by making proteins called antibodies.

The antibodies attach to the germs, marking them for destruction by other parts of the immune system.

- B. Directly destroy certain kinds of bacteria or cells infected with viruses or fungi.
- C. Play a role in either boosting or slowing the activity of other immune system cells.
- D. All of the above.

Correct answers: B, C.

- 21. Almost all cases of Hodgkin disease start in:
- A. B lymphocytes.
- B. T lymphocytes.
- C. Monocytes.
- D. Erythrocytes.

22. What is the most common type of Hodgkin disease? A. Nodular sclerosis Hodgkin's lymphoma. B. Lymphocyte-depleted Hodgkin's lymphoma. C. Lymphocyte-rich classical Hodgkin's lymphoma. D. Mixed cellularity Hodgkin's lymphoma. Correct answer: A. 23. What is the least common type of Hodgkin disease? A. Nodular sclerosis Hodgkin's lymphoma. B. Lymphocyte-depleted Hodgkin's lymphoma. C. Lymphocyte-rich classical Hodgkin's lymphoma. D. Mixed cellularity Hodgkin's lymphoma. Correct answer: B. 24. The cancer cells in classic Hodgkin's lymphoma are called: A. Virhov cells. B. Reed cells. C. Reed-Sternberg cells. D. Sternberg cells. Correct answer: C. 25. All types of Hodgkin disease are malignant (cancerous) because as they grow they can invade and destroy normal tissue and spread to other tissues. Is it true? A. Yes. B. No. Correct answer: A. 26. Reed–Sternberg cells are usually an abnormal type of: A. B lymphocytes. B. T lymphocytes. C. Monocytes. D. Erythrocytes. Correct answer: A.

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27. Patients of any stage with a large mass in the chest are usually treated with combined

chemotherapy:

C. BEACOPP.

A. MOPP.

B. ABCD.

28. What are the risk factors for Hodgkin disease?
A. Epstein–Barr virus infection/mononucleosis.
B. Family history.
C. HIV infection.
D. All of the above.
Correct answer: D.
29. Can Hodgkin disease be prevented?
A. Yes.
B. No.
C. Not in all cases.
Correct answer: C.
30. Can Hodgkin disease be found early?
A. Yes.
B. No.
C. In some cases.

D. All of the above.

Correct answer: D.

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