



## Carcinoma: Categorization and Causes with the Medical Diagnosis

Vaxmin Anniel\*

Department of Biomolecules, University of California, California, USA

### DESCRIPTION

Carcinoma is a type of cancer that develops from epithelial cells, which are the cells that line the inner and outer surfaces of the body. Epithelial cells can be found in the skin, breasts, lungs, kidneys, liver, pancreas, prostate, colon and other organs and tissues. Carcinoma accounts for 80% to 90% of all cancer diagnoses. Carcinoma can be classified by how much it has spread from its original site. Carcinoma can be invaded to the surrounding tissue or other parts of the body. Invasive carcinoma is a carcinoma that has grown beyond the original tissue and may affect nearby organs or structures. Metastatic carcinoma is a carcinoma that has spread to distant parts of the body through the bloodstream or lymphatic system.

There are different types of carcinoma based on the origin and characteristics of the epithelial cells.

### Types of carcinoma

**Adenocarcinoma:** This type of carcinoma originates from glandular epithelial cells that secrete fluids such as mucus or digestive juices. Adenocarcinoma can affect various organs such as the breast, lung, colon, stomach, prostate, pancreas and esophagus. Some examples of adenocarcinoma are hepatocellular carcinoma (liver cancer), renal cell carcinoma (kidney cancer).

**Basal cell carcinoma:** This type of carcinoma arises from basal cells which are the cells that produce new skin cells in the lower part of the epidermis (the outer layer of the skin). Basal cell carcinoma is the most common type of skin cancer and usually affects areas that are exposed to sunlight such as the face, ears, neck, arms and legs. Basal cell carcinoma tends to grow slowly and rarely spreads to other parts of the body.

**Squamous cell carcinoma:** This type of carcinoma develops from squamous cells, which are the flat cells that form the top layer of the epidermis. Squamous cell carcinoma can also affect areas that are exposed to sunlight, such as the skin, lips, mouth, throat and nose. Squamous cell carcinoma can also occur in the mucous membranes that line the lungs, esophagus, cervix etc.

Squamous cell carcinoma is more likely to grow faster and spread than basal cell carcinoma.

The symptoms and treatment of carcinoma depend on the type, location, stage and grade of the cancer. Some general symptoms that may indicate a possible carcinoma are:

- A change in the size, shape, color, or texture of a mole or a skin lesion.
- A persistent cough or hoarseness.
- Difficulty swallowing or breathing.
- Blood in the sputum (mucus coughed up from the lungs), urine, stool, or vomit.
- Pain or discomfort in a specific area.

The diagnosis of carcinoma usually involves a physical examination and a biopsy (removal of a small sample of tissue for microscopic analysis). Other tests such as blood tests, imaging tests (such as X-rays, ultrasound, CT scan, MRI scan) and endoscopy (insertion of a thin tube with a camera into an organ or cavity) may also be done to determine the extent and spread of the cancer.

### The treatment of carcinoma may include one or more of the following options:

**Surgery:** The removal of part or all of an organ or tissue affected by cancer.

**Radiation therapy:** The use of high-energy rays or particles to kill cancer cells or shrink tumors.

**Chemotherapy:** The use of drugs to kill cancer cells or stop them from growing.

**Immunotherapy:** The use of substances that stimulate the immune system to fight cancer cells.

**Targeted therapy:** The use of drugs that target specific molecules or genes involved in cancer growth or survival.

**Hormone therapy:** The use of drugs that block or interfere with hormones that stimulate certain types of cancer cells.

The prognosis for people with carcinoma varies depending on

**Correspondence to:** Vaxmin Anniel, Department of Biomolecules, University of California, California, USA, E-mail: anniel@gmail.com

**Received:** 03-Apr-2023, Manuscript No. BOM-23-21235; **Editor assigned:** 06-Apr-2023, Pre QC No. BOM-23-21235(PQ); **Reviewed:** 20-Apr-2023, QC No. BOM-23-21235; **Revised:** 27-Apr-2023, Manuscript No. BOM-23-21235 (R); **Published:** 05-May-2023, DOI: 10.35248/2167-7956.23.12.282.

**Citation:** Anniel V (2023) Carcinoma: Categorization and Causes with the Medical Diagnosis. J Biol Res Ther. 12:282.

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many factors such as the type stage, grade, location and response to treatment of the cancer. Some types of carcinoma have a better

prognosis than others. For example, basal cell carcinoma has a high cure rate if detected and treated early.