

What Does My Number Mean? A Basic Research Primer on Mammographic Density Toolkit Glossary

Breast cancer (brest KAN-ser) -Breast cancer is a malignant tumor that forms from the unrestricted growth of abnormal breast cells. It begins in the epithelial cells that form the milk ducts.

Breast density (brest DEN-sih-tee) -Breast density describes the relative amount of tissue present in the breast. Breast density compares the amount of breast and connective tissue shown on a mammogram to the amount of fat. Dense breasts have less fat and more connective tissue.

Breast Imaging Reporting and Data System (BIRADS) – BIRADS is a method used by radiologists to interpret and report the results of breast cancer screening and diagnosis tests such as mammograms, ultrasounds, and MRIs.

Cancer (KAN-ser) – Cancer is the name for a group of diseases in which abnormal cells grow out of control and spread to/invade nearby tissues.

Collagens (KAH-lu h-jen) -Collagens are the principle proteins in connective tissue. In the breast, they increase the mechanical strength and rigidity of the connective tissue network.

Connective tissue (kuh-NEK-tiv TIB-shoo) -Connective tissue supports and holds together other tissues. Connective tissue is a jelly-like substance that consists of a meshwork of proteins and fibers organized into a fishing-net like structure. In the breast, the connective tissue network provides an infrastructure for the whole breast.

Epithelial cells (eh-pih-THEE-lee-ul sel) -Epithelial cells line the internal and external surfaces of the body. Epithelial cells are the target cells for breast cancer. In the breast, they form the internal tree-like structure of the duct that produces milk.

Fat cells (fat sel) -Fat cells are part of the connective tissue of the breast and store fat and nutrients.

Fibroblasts (FY-broh-blast) -Fibroblasts are the most common type of cell found in connective tissue. They help to relay messages between the epithelial cells and the immune cells. In the breast, they also make and remodel the connective tissue.

Immune cells (ih-MYOON sel) - Immune cells are white blood cells that protect the body from infection.

Malignant (muh-LIG-nu nt) -Malignant is used to describe cancerous cells that can invade nearby tissue and spread to other parts of the body.

Mammogram (MA-muh-gram) – Mammograms are X-rays of the breast to determine whether abnormal growths or cysts are present that could be cancerous.

Mammographic Density (MA-mu h-GRaf-ik DEN-sih-tee) -Mammographic density is a score calculated for the whole breast tissue that is determined by a mammogram. It is a composite measurement of all the breast cell types measured on the Breast Imaging Reporting and Data System (BIRAD Scale).

Nerve cells (nerv sel) – Nerve cells are a type of cell that send and receive messages between the brain and the body through a weak electrical current.

Palpation (pal-PAY-sh un) – Palpation is the process of pressing on the body to feel the organs or tissues underneath. In the breast, it is used as a method to detect possible abnormalities.

Pre-malignant (prema'lignant) -Pre-malignant describes abnormal changes in cells that are poised to become cancerous.

Radiation (RAY-dee-AY-shu n) -Radiation is energy released in particle or electromagnetic waves commonly given off by radon gas, cosmic rays from outer space, medical x-rays, and energy given off by radioisotopes.

Viscoelasticity (visko-i,las'tisite) – Viscoelasticity is a combination of viscosity and elasticity. Elasticity is the measure of an object or material's stretchiness or flexibility. In the breast, elasticity provides the breast with its strength and firmness. Viscosity is the measure of a substance's resistance to flow. In the breast, viscosity allows for softness and compression. Viscoelasticity in the breast changes with age.

Sources:

Breast Cancer Glossary -- Project Lead

National Breast Cancer Coalition Fund
<http://www.alamobreastcancer.org/glossary/>

Genetics Home Reference -National Library of Medicines
<http://ghr.nlm.nih.gov/ghr/glossary/Glossary/>

Imaginis -Breast Cancer Glossary of Medical Terms
<http://www.imaginis.com/glossary/breast-cancer-glossary-of-medical-terms>

Medicine Net
<http://www.medterms.com/script/main/art.asp?articlekey=12443>

National Cancer Institute
<http://www.cancer.gov/dictionary?Cdrl0=269443>