

Breast Cancer in the United States: Fight the Fight

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ABSTRACT

Breast Cancer can occur in ladies and once in a while in men. Breast Cancer is the second most regular cancer analysed after cervical growth. Breast Cancer begins when cells in the breast start to become wild. These cells form a tumour that can be seen on an x-ray or felt as a lump. The tumour is cancerous if the cells grew into nearby tissues or spread to other parts of the body. Breast Cancer happens mostly in ladies, but men can get it, as well. Cells can develop in any part of the body can be cancerous, and can spread to different parts of the body. Most malignancies start in the ducts that supply milk to nipple. Some are formed in the gland that makes milk.

INTRODUCTION

Breast cancer is malignancy that generates from Breast cancer. It is likewise the second driving reason for malignancy passing among ladies after lung growth. Breast tumors start in the parts of the tissue that are organ for drain creation and channels that interface the lobules to the areola. Breast tumor is commonly distinguished either amid a screening examination, before indications have created, or after a lady notification a protuberance. The tissue for infinitesimal investigation can be gotten by means of a needle or surgical biopsy [1-5]. After a lady is determined to have bosom malignancy, specialists will make sense of whether it has spread, and assuming this is the case, how far. This is called organizing. Arranging is the way toward discovering how far reaching the malignancy is the point at which it is found. The stage is the most critical calculate choosing how to treat the disease and deciding how fruitful treatment may be. Bosom disease is arranged utilizing the American Joint Committee on Cancer (AJCC) TNM framework, which depends on the extent of the breast tumor (T) and in the event that it has developed into adjacent zones, whether the growth has spread to adjacent lymph nodes (N), whether the growth has metastasized (spread to different parts of the body) (M) [6-11]. Elements responsible for breast malignancy incorporate stoutness, absence of physical work out, drinking liquor, hormone substitution treatment amid menopause, ionizing radiation, early age at first feminine cycle, having kids late or not, old age, and family history.

The TNM framework may estimate survival rate, yet this framework ought not to be utilized alone to manage treatment. The TNM scores characterize the tumor from Stage 0 (the most minimal stage) to Stage IV. Updates of the staging rules are essential as imaging methods turn out to be more exceptional and as medicines keep on developing. The latest variant of the TNM organizing framework is the seventh release of the American Joint Committee on Cancer (AJCC) TNM Classification of Malignant Tumors [12-15]. In the event that malignancy cells have spread to your lymph nodes, there is a higher possibility that the cells could have spread (metastasized) to different destinations in your body. The more lymph nodes with breast malignancy cells, the more probable it is that the tumor might be found in other organs [16-20]. Due to this, discovering tumor in at least one lymph node frequently influences your treatment schedule. Surgery to remove at least one lymph node will be expected to know whether the growth has spread there.

Still, not all ladies with cancerous cells in their lymph nodes have metastases, and few ladies may have no malignancy cells in their lymph nodes and later report metastases. New results generated uncover truth that the cost of inaction will be enormous, with the number of ladies determined to have breast cancer every year will be double of 1.7 million in 2015 to 3.2 million in 2030 [21-23]. The environmental breast cancer movement is one sort of difference. Another is the dismissal of consistent idealism, aesthetic, and social pleasantness that the pink ribbon culture advances. Directing exploration into whether a chemical cause's disease is difficult, in light of the fact that suspect chemicals can't morally be given to individuals to check whether they because Individuals exposed in the past can be examined, however data about the dosage and timing might be wrong. Animal studies can give valuable data; however don't generally apply to people. What's more, individuals are regularly subjected to blends of chemicals interaction may be complex, with effects depending upon hereditary character [24-32].

Results for breast cancer depend upon the cancer type sort, degree of infection, and individual's age. Survival rates in the developed world are high, with somewhere around 80% and 90% of those in England and the United States alive for no less than 5 years. In developing nations survival rates are poorer [33-40]. Worldwide, breast cancer is the leading cancer in women, representing 25% of all cases. In 2012 about 1.68 million cases and 522,000 deaths happened. It is more common in developing countries and is more than 100 times common women than in men.

GLOBAL BURDEN OF BREAST IN UNITED STATES

The American Cancer Society's evaluations for breast cancer in the United States for 2016 are around 246,660 new instances of invasive tumor growth will be analyzed in women. Around 61,000 new instances of carcinoma in situ (CIS) will be analyzed (CIS is non-invasive and is the most punctual type of breast cancer). Around 40,450 ladies will eventually die from breast malignancy [41-57]. The American Cancer Society gives an outline of female breast cancer statistics in the United States, including information on rate, mortality, survival, and screening. Around 231,840 new instances of breast malignancy and 40,290 breast tumor deaths are to occur among US ladies. Female breast cancer disease occurrence and death rates shift generously by race/ethnicity. Non-Hispanic (white) and non-Hispanic (dark) ladies have higher bosom tumor rate and demise rates than females of other race/ethnicities [58-64]. Around the world, consistently more than 2 million ladies are determined to have breast cancer. What's more, around 800000 die from these ailments. Where a women lives, her ethnicity, and financial and migration status will estimate if she will get one of these cancer, and at last whether she will survive [65-71]. 5-year survival after finding for breast cancer malignancy ranges from around 80% in 34 nations including Australia, the UK, Ireland, France, Germany, and the USA and 50% in South Africa, Mongolia, and India. More than 50,000 ladies are determined to have tumor every year in the US. Around 1 in 8 U.S. ladies (around 12%) will have this disease through the span of her lifetime. In 2016, an expected 246,660 new instances of breast tumor growth are to be analyzed in ladies in the U.S., alongside 61,000 new instances of (in situ) breast cancer malignancy. Around 40,450 ladies in the U.S. are to die in 2016 from breast cancer [72-83].

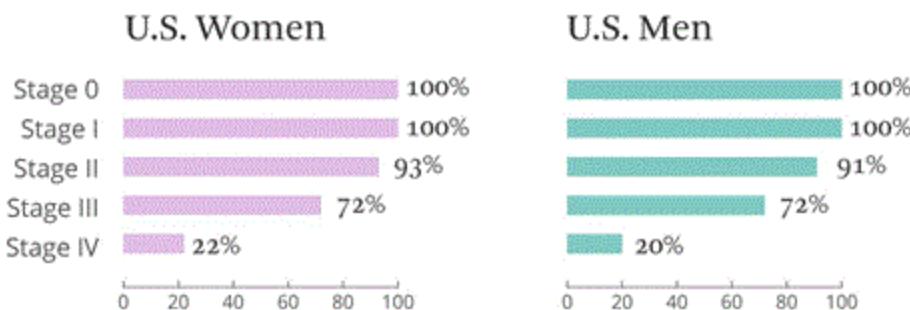


Figure 1: 5-Year survival rate.

Ladies (and men) with a family history of breast malignancy, particularly in a first-degree relative (mother, sister, little girl, father, sibling, or child) are at expanded danger of developing breast cancer disease; hazard is higher with more than one influenced first-degree relative [84-95]. Breast cancer commonly creates no side effects when the tumor is little and most effectively treated. It is vital for ladies to follow appropriate rules or guidelines for detecting Breast cancer at an early stage. At the point when Breast cancer has developed to a size that can be felt, the most widely recognized physical sign is an easy painless. Some of the time Breast cancer tumor can spread to underarm lymph node and cause a knot or swelling, even before the first Breast cancer tumor is sufficiently substantial to be

felt. Less regular signs and side effects incorporate Breast pain bosom or heavy feeling; visible changes to the breast for example, swelling, thickening, or redness of the Breast skin; and areola anomalies, for example, fluid discharge, inverted nipple, crust formation, disintegration. Note that pain does not demonstrate the presence or the absence of Breast cancer. Any change in the breast appearance or feeling ought to be assessed by a doctor at the earliest opportunity. Acquired changes (hereditary modifications) in BRCA1 and BRCA2, the most all around considered breast cancer malignancy represent 5%-10% of all female breast diseases, an expected 5%-20% of male breast cancer and 15%-20% of all familial breast cancer [96-100]. Breast tissue thickness (a mammographic marker of the quantity of the breasts glandular and connective tissue with respect to its fatty tissue) has been appeared to be a hazard considers for the advancement of breast cancer, alcohol may likewise build breast density. Some medications additionally influence density, including tamoxifen (reduces density) and consolidated menopausal hormone treatment. A survey of 23 studies found that utilization of fertility medications, including clomiphene, gonadotropins, and gonadotropin-releasing hormones, was not connected with breast cancer hazard. Postmenopausal ladies with actually high levels of endogenous sex hormones have twice the danger of breast malignancy. Most reviews propose that breastfeeding for a year or more.

Somewhat decreases danger of breast malignancy. Breast cancer increases marginally for every year early monthly cycle starts (by around 5%) and for every year later menopause starts (by around 3%). US high number of breast cancer cases is being fuelled by the Western way of life that urges ladies to over-eat, drink an excess of and practice no exercise. Breast cancer rate in US nation is more than four circumstances higher than in eastern Africa, which has the most minimal cases on the planet [101-106]. Continuous Update Project Panel expressed that there was persuading proof that devouring mixed beverages builds the danger of this tumor and lactation secures against it. Breast tumor is thought to be because of a mix of way of life, hereditary and natural components and a hefty portion of these may contrast between the US and different populaces. Some hazard elements can't be changed, ladies can lessen their hazard by drinking less liquor, keeping up a sound weight and doing exercise routinely. In USA New Cases of Breast Cancer (every day) are 527, Breast Cancer Deaths (every day) are 110 Lives that could have been spared through early location (every day) are 37. As indicated by appraisals of lifetime hazard by the U.S. National Cancer Institute, around 13.2% of ladies in the U.S. will have this disease which is the same as saying 1 in 7.57 individuals [107-113]. Furthermore, since there is no such thing as .57 of a man, the basic expression is "1 in 8. There were an expected 14.1 million disease cases far and wide in 2012, as per the World Cancer Research Fund International. Of those cases, the United States had the 6th most astounding number of new findings, with 318 cases for every 100,000 individuals. Early crusades incorporated the "Ladies' Field Army", run by the American Society for the Control of Cancer (the trailblazer of the American Cancer Society) amid the 1940s. Unequivocally utilizing a military representation, they advanced early discovery and provoke medicinal mediation as each women responsibility in the war on malignancy. In 1952, the principal distributed care group, called Reach to Recovery, was formed. Later assumed control by the American Cancer Society, it provided post-F, in-healing center visits from ladies who had survived breast cancer, who shared their own particular encounters, handy exhortation, and emotional support, yet never restorative data [114-120]. This was the principal program intended to advance rebuilding of a feminine appearance, e.g., through giving breast prostheses, as an objective.

Omics studies play key role in showcasing researcher's endless efforts and delivers their work across the globe. [Advances in Cancer Prevention](#) address a wide range of malignancy, how growth spreads in the body and their prevention. World Congress on Cancer Therapy remarkable research discoveries has been introduced. The scientific lectures conveyed in this international event have discussed a standout amongst the most difficult challenge of the world, Breast Cancer. The meeting was conducted in a productive way and passed innovative opinions on Breast Cancer epidemic and its effect on worldwide [121-124]. This sickness is testing the world. As a communication this paper reports the effect of Breast Cancer in the United States, organizations and available options regarding control and prevention we have. All in all, this article noted the noteworthy remarks to battle against the emerging burden on human race. Local treatments are some treatments are called Local treatments, which mean they treat the tumor without influencing other parts of the body. Types of local treatment utilized for Breast Cancer includes radiotherapy and surgery. These treatments are used for cancer in early stages can be used in other situations too. Systemic treatments drugs are used to treat breast cancer administered orally or via directly into the blood. They reach to cancer cells. The body these include Chemotherapy, Hormone therapy, Targeted therapy. Chemotherapy is used to cure early stages of cancer to minimize the chances of recurring cancer. It completely destroys cancer cells in the body. Hormone therapy lowers estrogen level in the body. Estrogen hormone is produced by ovaries in women. Hormone therapy blocks the action of estrogen on cancer cells. These include Aromatase inhibitors, selective estrogen receptor modulators and estrogen receptor down regulators [125-129]. This therapy is also used to treat menopausal side effects. Hormone therapy is used for hormone receptor positive breast Cancer. This therapy lowers the risk of early stage cancer it also helps by shrinking cancer cells or slowing their growth rate.

BREAST CANCER AWARENESS

Breast cancer awareness is an effort to raise awareness and reduce the stigma of breast cancer through education on symptoms and treatment. Supporters hope that greater knowledge will lead to earlier detection of breast cancer, which is associated with higher long-term survival rates, and that money raised for breast cancer will produce a reliable, permanent cure.

Breast cancer advocacy and awareness efforts are a type of health advocacy. Breast cancer advocates raise funds and lobby for better care, more knowledge, and more patient empowerment. They may conduct educational campaigns or provide free or low-cost services [130-134]. Breast cancer culture, sometimes called pink ribbon culture, is the cultural outgrowth of breast cancer advocacy, the social movement that supports it, and the larger women's health movement.

The pink ribbon is the most prominent symbol of breast cancer awareness, and in many countries the month of October is National Breast Cancer Awareness Month. Some government national breast cancer organizations receive financial support from corporate sponsorships. The brand ties together fear of cancer, hope for early identification and successful treatment, and the moral goodness of women with breast cancer and anyone who visibly identifies themselves with breast cancer patients. This brand permits and even encourages people to substitute conscientious consumption and individual symbolic actions, like buying or wearing a pink ribbon, for concrete, practical results, such as collective political action aimed at discovering non-genetic causes of breast cancer. Each year, the month of October is recognized as National Breast Cancer Awareness Month by many governments, the media, and cancer survivors. The month-long campaign has been called Pinktober because of the increased production of pink goods for sale, and National Breast Cancer Industry Month by critics like Breast Cancer Action. NBCAM was begun in 1985 by the American Cancer Society and pharmaceutical company AstraZeneca one of these things are ordinary items that have been repackaged or repositioned to use cause related advertising, for example, teddy bears, garments, adornments, candles, and mugs. These objects offer buyers a chance to make purchase and donate money to a breast cancer organization. Some of these items are delivered or potentially sold by breast cancer survivors or philanthropies for raising money on purposes, while others are for benefits notwithstanding gathering pledges. Makers additionally deliver items with pink marks or pink lace logos to donate money for the cause. Some cases the company is providing free advertising for a selected charity. A few organizations have been found to spend significantly more cash promoting "pink items" and tie-ins than they give to beneficent associations supporting exploration or patients [135-139]. Numerous corporate and altruistic associations run commercials identified with breast cancer, particularly amid National Breast Cancer Awareness Month, in the trust of expanding deals by adjusting themselves to a positive, supportive message. Selling pink items, corporate ads may advance the organization's dynamic arrangements, or may give free promotion for a charity. Medical institutes may promote ads for mammogram or other related services. Non-benefit associations get advantage from open administration declarations, which are free promotions given by daily papers, radio and TV channels, and other media. Some promoting obscures the line amongst commercials and occasions, flash mob as a guerrilla marketing strategy. Breast Cancer has been known to instructed ladies and parental figures all through history, yet humility and frightfulness at the results of to a great extent untreatable sickness made it an unthinkable subject. The Breast Cancer development, which created in the 1990s out of twentieth century women's activist developments and the ladies' wellbeing development, has for the most part removed taboos through its cutting edge support and campaigns. Women fear dying due to breast cancer than dying from coronary illness, despite the fact that ladies are eleven times more prone to die from coronary illness or stroke than from Breast Cancer. According to cardiologist Lisa Rosenbaum, this might be on the grounds that ladies "see coronary illness as the outcome of having accomplished something awful, while to get bosom tumor is to have something awful happen to you". As the dominant part of ladies with Breast Cancer have no hazard calculates other than sex and age, the ecological Breast Cancer development speculates contamination as a huge cause, perhaps from pesticides, plastics, and modern overflow in ground water. Large associations, for example, Susan G. Komen for the Cure and the American Cancer Society, are not part of the natural bosom growth movement. These vast associations advantage the most from corporate sponsorships that commentators disparage as pinkwashing, e.g., polluting industrial companies attempting to have public goodwill by distributing commercials embellished with pink ribbon, instead of reducing their pollution under the principles.

ROLE OF OPEN ACCESS JOURNALS

Open Access looks to return insightful distributing to its unique reason: to spread learning and permit that information to be based upon. Price obstructions ought not to prevent students (or anybody) from accessing research they require. Open Access, and the open accessibility and search ability of academic research that it involves, will have a critical positive effect on everything from training to the practice of drug to the capacity of business visionaries to enhance. Students in any field require access to the most recent research to have total

information in their field of study and hit the ground pursuing graduation. Restricted access to research makes students settle for the data that is accessible instead of that which is generally pertinent. Open Access can guarantee students get the most of the information available and are not misleadingly restricted by the choice of selective journals their institute can give. At times when educators can't get to the latest research, they are denied of the chance to bring that material into the classroom. With science progressing at a continually expanding pace, it's critical that educators have access to latest research. In any case, in the course of recent decades Open Access Journals are at the focus and giving new platform to the scientists to update their present knowledge. The Open access publishers support the researchers from all parts, regardless to economical and geological boundaries to publish their novel discoveries in their peer-reviewed journals.

[Journal of Breast cancer](#) research is one of the prestigious journal, which concentrates on ongoing research and flow and progress of Breast Cancer research and informative work of Breast Cancer look and publish quality peer reviewed articles subjected to Breast Cancer [140-145]. This journal is high impact open access journal in the field of Breast Cancer.

[Journal of Cancer Diagnosis](#) is a peer reviewed open access journal that publishes cutting edge latest research findings in the field. Journal builds intellectual discussion forums to act as a bridge between academics, clinicians and other professionals. Breast cancer is global concern and spreading awareness is a big challenge for researchers. To overcome obstruction, [Archives in Cancer Research](#) is publishing trends in Cancer Diagnosis. Journal provides expert opinions, reviews and surveys around the globe to enhance knowledge and guide the world for battling Breast Cancer. Breast Cancer can be cured by following guidelines [Journal of Cancer Medicine and Anti-Cancer Drugs](#) and [Journal of Cancer Science and Therapy](#) is an online source that is accessible online with most recent reports and progress on Breast Cancer, medications, progressed diagnostic techniques, and so forth. Scientific conferences draw the consideration of the researchers where instinct discussions and board meetings facilitate better understanding about Breast Cancer. [5th World Congress on Breast Cancer](#) the known meetings which is conducted by world class research authorities and contains 8 Keynote talks from specialists of the field. The 3 days occasion deliberates focuses on diagnosis, treatment and worldwide status of disease and wellbeing. [4th World Congress on Breast Cancer and Women Health](#) and World Congress on Breast Pathology are latest events held in the field of field of Breast Cancer. These occasions carried out nurturing scientific sessions, individual speeches, lectures and discussions between continents. All in all, the Open Access Journal and international events are providing information to fight against the global threat. Journal of Cancer Diagnosis is a peer reviewed open access journal that publishes cutting edge latest research findings in the field. Journal builds intellectual discussion forums to act as a bridge between academics, clinicians and other professionals. Breast cancer is global concern and spreading awareness is a big challenge for researchers. To overcome obstruction, Archives in Cancer Research is publishing trends in Cancer Diagnosis [146-150]. Journal provides expert opinions, reviews and surveys around the globe to enhance knowledge and guide the world for battling Breast Cancer. Breast Cancer can be cured by following guidelines Journal of Cancer Medicine and Anti-Cancer Drugs and Journal of Cancer Science and Therapy is an online source that is accessible online with most recent reports and progress on Breast Cancer, medications, progressed diagnostic techniques, and so forth. Scientific conferences draw the consideration of the researchers where instinct discussions and board meetings facilitate better understanding about Breast Cancer. 5th World Congress on Breast Cancer the known meetings which is conducted by world class research authorities and contains 8 Keynote talks from specialists of the field. The 3 days occasion deliberates focuses on diagnosis, treatment and worldwide status of disease and wellbeing. 4th World Congress on Breast Cancer and Women Health and World Congress on Breast Pathology are latest events held in the field of field of Breast Cancer. These occasions carried out nurturing scientific sessions, individual speeches, lectures and discussions between continents. All in all, the Open Access Journal and international events are providing information to fight against the global threat.

REFERENCES

1. Cserni G, et al. Improving the reproducibility of diagnosing micrometastases and isolated tumor cells. *Cancer*. 2004;103:358-367.
2. Schwartz GF, et al. Proceedings of the international consensus conference on breast cancer risk, genetics, & risk management, April, 2008. *Breast J*. 2008;13:1524-4741.
3. Turnbull C and Rahman N. Genetic predisposition to breast cancer: past, present, and future. *Annu Rev Genomics Hum Genet*. 2008;9:321-345.

4. Collaborative Group on Hormonal Factors in Breast Cancer. Menarche, menopause, and breast cancer risk: individual participant metanalysis, including 118964 women with breast cancer from 117 epidemiological studies. *Lancet Oncol.* 2012;13:1141-1151.
5. K McPherson, et al. Breast cancer—epidemiology, risk factors, and genetics. *BMJ.* 2000;321:624-628.
6. Steven R. Cummings, et al. The effect of raloxifene on risk of breast cancer in postmenopausal women: results from the more randomized trial. *JAMA.* 1999;281:2189-2197.
7. R. K. Han, et al. Does raloxifene reduce postmenopausal women's risk of breast cancer. *Can Fam Physician.* 2000;46:77-80.
8. Muhammad Al-Hajj, et al. Prospective identification of tumorigenic breast cancer cells. *Proc Natl Acad Sci U S A.* 2003;100:3983-3988.
9. Rowan T. Chlebowski, et al. Influence of estrogen plus progestin on breast cancer and mammography in healthy postmenopausal women: the women's health initiative randomized trial. *2003;289:3243-3253.*
10. Julian Peto, et al. Prevalence of BRCA1 and BRCA2 gene mutations in patients with early-onset breast cancer. *J Natl Cancer Inst.* 1999;91:943-949.
11. Rosemary Yancik, et al. Effect of Age and Comorbidity in Postmenopausal Breast Cancer Patients Aged 55 Years and Older. *2001;285: 885-892.*
12. Aman U. Buzdar, et al. Significantly higher pathologic complete remission rate after neoadjuvant therapy with trastuzumab, paclitaxel, and epirubicin chemotherapy: results of a randomized trial in human epidermal growth factor receptor 2-positive operable breast cancer. *J Clin Oncol.* 2005;23:3676-3685.
13. J. William Eley, et al. Racial differences in survival from breast cancer: results of the national cancer institute black/white cancer survival study. *JAMA.* 1994;272:947-954.
14. Lisa A. Carey, et al. The triple negative paradox: primary tumor chemosensitivity of breast cancer subtypes. *Clin Cancer Res.* 2007;13:2329-2334.
15. Massimo Cristofanilli, et al. Circulating tumor cells: a novel prognostic factor for newly diagnosed metastatic breast cancer. *J Clin Oncol.* 2005;23:1420-1430.
16. Fehm T, et al. Cytogenetic evidence that circulating epithelial cells in patients with carcinoma are malignant. *Clin Cancer Res.* 2002;8:2073-2084.
17. Gaforio JJ, et al. Detection of breast cancer cells in the peripheral blood is positively correlated with estrogen-receptor status and predicts poor prognosis. *Int J Cancer.* 2003;107:984-990.
18. Astrup F, et al. Prognostic value of genomic alterations in minimal residual cancer cells purified from the blood of breast cancer patients. *Br J Cancer.* 2000;83:1664-1673.
19. Terstappen LWMM, et al. Peripheral blood tumor cell load reflects the clinical activity of the disease in patients with carcinoma of the breast. *Int J Oncol.* 2000;17:573-578.
20. Carey RW, et al. Carcinocythemia (carcinoma cell leukemia): An acute leukemia-like picture due to metastatic carcinoma cells. *Am J Med.* 1976;60:273-278.
21. Myerowitz RL, et al. Carcinocythemia (carcinoma cell leukemia) due to metastatic carcinoma of the breast: Report of a case. *Cancer.* 1977;40:3107-3111.
22. Gallivan MV and Lokich JJ. Carcinocythemia (carcinoma cell leukemia): report of two cases with English literature review. *Cancer.* 1984;53:1100-1102.
23. Cristofanilli M, et al. Circulating tumor cells predict progression free survival and overall survival in metastatic breast cancer. *N Engl J Med.* 2004;351:781-791.
24. Allard WJ, et al. Tumor cells circulate in the peripheral blood of all major carcinomas but not in healthy subjects or patients with non-malignant diseases. *Clin Cancer Res.* 2004;10:6897-6904.
25. Boyd NF, et al. Mammographic density and the risk and detection of breast cancer. *N Engl J Med.* 2007;356:227-236.
26. Cuzick J, et al. Tamoxifen-induced reduction in mammographic density and breast cancer risk reduction: a nested case-control study. *J Natl Cancer Inst.* 2011;103:744-752.
27. Schousboe JT, et al. Personalizing mammography by breast density and other risk factors for breast cancer: analysis of health benefits and cost-effectiveness. *Ann Intern Med.* 2011;155:10-20.
28. Nickson C, et al. AutoDensity: an automated method to measure mammographic breast density that predicts breast cancer risk and screening outcomes. *Breast Cancer Res.* 2013;15:R80.

29. Keller BM, et al. Preliminary evaluation of the publicly available Laboratory for Breast Radiodensity Assessment (LIBRA) software tool: comparison of fully automated area and volumetric density measures in a case-control study with digital mammography. *Breast Cancer Res.* 2015;17:117.
30. Damases CN, et al. Mammographic density measurements are not affected by mammography system. *J Med Imaging.* 2015;2:501.
31. Ghoussaini M, et al. Inherited genetic susceptibility to breast cancer: the beginning of the end or the end of the beginning. *Am J Pathol.* 2013;183:1038-1051.
32. Gail MH. Personalized estimates of breast cancer risk in clinical practice and public health. *Stat Med.* 2011;30:1090-1104.
33. Gail MH, Brinton LA, Byar DP, Corle DK, Green SB, Schairer C, et al. Projecting individualized probabilities of developing breast cancer for white females who are being examined annually. *J Natl Cancer Inst.* 1989;81(0027-8874 (Print)):1879-86.
34. Collins A and Politopoulos I. The genetics of breast cancer: risk factors for disease. *Appl Clin Genet.* 2011;4:11-19.
35. Innos K and Horn-Ross PL. Risk of second primary breast cancers among women with ductal carcinoma in situ of the breast. *Breast Cancer Res Treat.* 2008;111:531-540.
36. Franceschi S, et al. Second cancers following in situ carcinoma of the breast. *Int J Cancer.* 1998;77:392-395.
37. Warnberg F, et al. Risk of subsequent invasive breast cancer after breast carcinoma in situ. *Lancet.* 2000;355:724-725.
38. Ji J and Hemminki K. Risk for contralateral breast cancers in a population covered by mammography: effects of family history, age at diagnosis and histology. *Breast Cancer Res Treat.* 2007;105:229-236.
39. Houghton J, et al. Radiotherapy and tamoxifen in women with completely excised ductal carcinoma in situ of the breast in the UK, Australia, and New Zealand: randomised controlled trial. *Lancet.* 2003;362:95-102.
40. Fisher B, et al. Tamoxifen for prevention of breast cancer: report of the national surgical adjuvant breast and bowel project p-1 study. *J Natl Cancer Inst.* 1998;90:1371-1388.
41. dos Santos Silva I, et al. Birth size and breast cancer risk: re-analysis of individual participant data from 32 studies. *PLoS Med.* 2008;5:e193.
42. Michels KB and Xue F. Role of birthweight in the etiology of breast cancer. *Int J Cancer.* 2006;119:2007-2025.
43. Savarese TM, et al. Normal breast stem cells, malignant breast stem cells, and the perinatal origin of breast cancer. *Stem Cell Rev.* 2006;2:103-110.
44. McCormack VA and dos Santos Silva I. Breast density and parenchymal patterns as markers of breast cancer risk: a meta-analysis. *Cancer Epidemiol Biomarkers Prev.* 2006;15:1159-1169.
45. Vachon CM, et al. Mammographic density, breast cancer risk and risk prediction. *Breast Cancer Res.* 2007;9:217.
46. Antoniou A, et al. Average risks of breast and ovarian cancer associated with BRCA1 or BRCA2 mutations detected in case series unselected for family history: a combined analysis of 22 studies. *Am J Hum Genet.* 2003;72:1117-1130.
47. Thompson D, et al. Easton DF, Consortium BCL. Cancer Incidence in BRCA1 mutation carriers. *J Natl Cancer Inst.* 2002;94:1358-1365.
48. Anderson WF, et al. Male breast cancer: a population-based comparison with female breast cancer. *J Clin Oncol.* 2010;28:232-239.
49. Shaaban AM, et al. A comparative biomarker study of 514 matched cases of male and female breast cancer reveals gender-specific biological differences. *Breast Cancer Res Treat.* 2012;133:949-958.
50. Hortobagyi GN, et al. The global breast cancer burden: variations in epidemiology and survival. *Clin Breast Cancer.* 2005;6:391-401.
51. Anderson BO and Jakesz R. Breast cancer issues in developing countries: an overview of the Breast Health Global Initiative. *World J Surg.* 2008;32:2578-2585.
52. Leong SP, et al. Is breast cancer the same disease in Asian and Western countries. *World J Surg.* 2010;34:2308-2324.
53. Kerlikowske K, et al. Are breast density and bone mineral density independent risk factors for breast cancer. 2005. *J Natl Cancer Inst.* 2005;97:368-374.

54. Amir E, et al. Assessing women at high risk of breast cancer: a review of risk assessment models. *J Natl Cancer Inst.* 2010;102:680-691.
55. Rockhill B, et al. Validation of the Gail, et al. model of breast cancer risk prediction and implications for chemoprevention. *J Natl Cancer Inst.* 2001;93:358-366.
56. Madigan MP, et al. Proportion of breast cancer cases in the United States explained by well-established risk factors. *J Natl Cancer Inst.* 1995; 87:1681-1685.
57. Silva IS, et al. Birth size and breast cancer risk: re-analysis of individual participant data from 32 studies. *PLoS Med.* 2008;5:e193.
58. Wohlfahrt J and Melbye M. Maternal risk of breast cancer and birth characteristics of offspring by time since birth. *Epidemiology.* 1999;10:441-444.
59. Hamajima N, et al. Alcohol, tobacco and breast cancer—collaborative reanalysis of individual data from 53 epidemiological studies, including 58,515 women with breast cancer and 95,067 women without the disease. *Br J Cancer.* 2002;87:1234-1245.
60. Suzuki R, et al. Orsini N, Mignone L, Saji S, Wolk A. Alcohol intake and risk of breast cancer defined by estrogen and progesterone receptor status—a meta-analysis of epidemiological studies. *Int J Cancer.* 2008;122:1832-1841.
61. Li CI, et al. Alcohol consumption and risk of postmenopausal breast cancer by subtype: the women's health initiative observational study. *J Natl Cancer Inst.* 2010;102:1422-1431.
62. Chen WY, et al. Moderate alcohol consumption during adult life, drinking patterns, and breast cancer risk. *JAMA.* 2011;306:1884-1990.
63. Dorgan JF, et al. Serum hormones and the alcohol-breast cancer association in postmenopausal women. *J Natl Cancer Inst.* 2001;93:710-715.
64. Parker SL, et al. Cancer statistics, 1996. *CA Cancer J Clin.* 1996;46:5-27.
65. Langagergaard V, et al. Birth outcome in women with breast cancer. *Br J Cancer.* 2006;94:142-146.
66. Bergh J, et al. A systematic overview of chemotherapy effects in breast cancer. *Acta Oncol.* 2001;40:253-281.
67. Clarke M, et al. Effects of radiotherapy and of differences in the extent of surgery for early breast cancer on local recurrence and 15-year survival: an overview of the randomised trials. *Lancet.* 2005;366:2087-2106.
68. Johnsson A, et al. Factors associated with return to work after breast cancer treatment. *Acta Oncol.* 2007;46:90-96.
69. Johnsson A, et al. Predictors of return to work ten months after primary breast cancer surgery. *Acta Oncol.* 2009;48:93-98.
70. Wallace MS, et al. Pain after breast surgery: a survey of 282 women. *Pain.* 1996;66:195-205.
71. Nesvold IL, et al. Arm and shoulder morbidity in breast cancer patients after breast-conserving therapy versus mastectomy. *Acta Oncol.* 2008;47:835-842.
72. Goss PE, et al. A randomized trial of letrozole in postmenopausal women after five years of tamoxifen therapy for early-stage breast cancer. *N Engl J Med.* 2003;349:1793-1802.
73. Vatten LJ, et al. Birth weight as a predictor of breast cancer: a case-control study in Norway. *Br J Cancer.* 2002;86:89-91.
74. Salha Bujassoum Al-Bader, et al. The development of breast cancer screening in qatar (January 2008 – April 2015). *Evid Based Med Pract.* 2016;1:107.
75. Grant J, et al. Importance of a multidisciplinary approach to breast cancer treatment in pregnancy: case report of new diagnosis of pregnancy-associated breast cancer. *J Carcinog Mutagen.* 2016;7:279.
76. Rasha Abd El-Ghany Khedr and Amr Abd El-Aziz Ghannam. A clinical phase ii study of oral vinorelbine in her-2 negative metastatic breast cancer. *J Cancer Sci Ther.* 2016;8:262-267.
77. Marina E Cazzaniga, et al. Metronomic oral combination of vinorelbine and capecitabine in advanced breast cancer: is it time to be considered for daily clinical practice. *J Cancer Clin Trials.* 2016;1:119.
78. Li Zhang, et al. Targeting triple negative breast cancer with a small-sized paramagnetic nanoparticle. *J Nanomed Nanotechnol.* 2016;7:404.
79. Pooja Prasad and Michelle Shayne. Effect of dietary soy on breast cancer recurrence and mortality: a review. *J Nutr Food Sci.* 2016;6:563.
80. Wei Zou, Y Wang. ER-alpha 36, A novel biomarker for er-negative breast cancer. *Mol Biol.* 2016;5:e138.

81. Youssef Seddik, et al. Choroidal metastasis as a first sign of recurrence in a patient with breast cancer: a case report. *Breast Can Curr Res.* 2016;1:112.
82. Louis Robby, et al. Metabolic phenotyping of blood plasma by proton nuclear magnetic resonance to discriminate between colorectal cancer, breast cancer and lung cancer. *Mol Biol.* 2016;6:187.
83. Namini NS. Systematic review of the risk of permanent alopecia with docetaxel treatment for breast cancer. *J Clin Case Rep.* 2016;6:851.
84. Kitsera N, et al. Detection of gene mutation in the 185del ag brca1 in families with hereditary breast cancer. *Hereditary Genet.* 2016;5:171.
85. Ryutaro Mori, et al. Effective hormone therapy reduces the efficacy of subsequent chemotherapy in hormone-receptor-positive metastatic breast cancer. *Chemotherapy.* 2016;5:210.
86. Ehab Mohammed Hassanen, Maha Lotfy Zamzam, Alaaeldeen Mahmoud Elbahai and Mohamed Omara Ibrahim Hussein, et al. (2016) Comparative Study between Vinorelbine based Versus Taxanes based Chemotherapy in Treatment of Parenchymal Metastatic Breast Cancer. *Chemotherapy.* 2016;5:208.
87. Alejandra de Andres Gomez. The challenge of pn3 stage in breast cancer. *Breast Can Curr Res.* 2016;1:e103.
88. Manna E, et al. Early detection of breast cancer: management with radiotherapy associated with cardiovascular disease (cvd), heart failure among the breast cancer survivors woman. *J Women's Health Care.* 2016;5:323.
89. Rasha Abd El-Ghany Khedr, et al. The prognostic role of tumor-infiltrating lymphocytes cd8 and foxp3 and their impact on recurrence in breast cancer patients. *J Cancer Sci Ther.* 2016;8:206-212.
90. Yu-Chieh Chen, et al. Validation of breast cancer survival prediction model with seer database. *J Integr Oncol.* 2016;5:174.
91. Pooja Mehta and Megha Purohit. Kernel oriented multivariate feature selection for breast cancer data classification via mrmr filter. *J Health Med Inform.* 2016;7:239.
92. Alessandro Peretti and Francesco Amenta. Breast cancer prediction by logistic regression with cuda parallel programming support. *Breast Can Curr Res.* 2016;1:111.
93. Srilupa Hari Gopal and Salil K Das. Role of lactoferrin in the carcinogenesis of triple-negative breast cancer. *J Cancer Clin Trials.* 2016;1:e105.
94. Verna V and Mary-Ann Di. Aspergillus Lymphadenitis mimicking cervical lymph node recurrence in a breast cancer patient. *J Med Diagn Meth.* 2016;5:220.
95. Agboola AOJ, et al. Cadherin expression in the nigerian and united kingdom breast cancer cases: a comparison of clinicopathological and prognostic characteristics. *Surgery Curr Res.* 2016;6:271.
96. Laili Rahayuwati, et al. Health seeking behavior on breast cancer therapies: patients versus providers views. *J Comm Pub Health Nurs.* 2016;2:129.
97. Takuya Nagata, et al. KLF4 Improve prognosis of triple-negative breast cancer by suppression of epithelial-mesenchymal transition. *Breast Can Curr Res.* 2016;1:110.
98. Marta Honório, et al. Decreased survival in african patients with triple negative breast cancer. *J Palliat Care Med.* 2016;6:270.
99. Hébert Maude, et al. a grounded theory exploring the health status perceptions shift of women living with breast cancer. *Breast Can Curr Res.* 2016;1:109.
100. Yanfeng Li, et al. A survey of computer-aided detection of breast cancer with mammography. *J Health Med Inform.* 7:238.
101. Graham A. Colditz, et al. Risk factors for breast cancer according to family history of breast cancer. *JNCI.* 1995;88:365-371.
102. S. Eva Singletary, et al. Revision of the american joint committee on cancer staging system for breast cancer. *J Clin Oncol.* 2002;20:3628-3636.
103. Naeini EE, et al. The effectiveness of stress management training on hardiness in patients with breast cancer. *Abnorm Behav Psychol.* 2016;2:115.
104. Hara F, et al. Randomized, optimal dose finding, phase ii study of tri-weekly nabpaclitaxel in patients with metastatic breast cancer (ABROAD). *J Clin Trials.* 2016;6:267.
105. Hatch SS, et al. Triple negative breast Cancer: It's time to kick the can down the Road. *J Oncol Transl Res.* 2016;2:e101.

106. Lagiou M, et al. Molecular analysis of RASSF1 gene methylation and mRNA expression in sporadic breast cancer. *Clin Med Biochemistry*. 2016;2:118.
107. Rashid OM, et al. A systematic approach to preclinical trials in metastatic breast cancer. *Chemotherapy (Los Angel)*. 2016;5:204.
108. Bila A and Gramatiuk S. To compare the mitochondrial complex between metastasis breast cancer and patients with breast cancer and hepatitis C virus. *J Women's Health Care*. 2016;5:315.
109. Kinoshita S, et al. Clinicopathological assessment of patients with locally advanced breast cancer with 10 or more lymph node metastases. *Breast Can Curr Res*, 2016;1:107.
110. Omran M, et al. A prospective pharmacokinetic study of docetaxel in breast cancer patients in relation to CYP3A4 activity. *Clin Pharmacol Biopharm*. 2016;5:156.
111. Li T, et al. Combination of Nab-paclitaxel with trastuzumab as neoadjuvant chemotherapy for HER2-positive breast cancer patients: experience from a single center. *Clin Exp Pharmacol*. 2016;6:209.
112. Osman U and Gilbert CR. Bronchial necrosis following bevacizumab and stereotactic body radiotherapy for treatment of metastatic breast cancer. *J Pulm Respir Med*. 2016;6:345.
113. Grondona JP, et al. Hepatic resection for breast cancer liver metastases. *J Cancer Clin Trials*. 2016;1:110.
114. Devi VG, et al. Therapeutic potentials of CD151 shRNA in targeting metastasis of triple negative breast cancer cell line MDA-MB-231. *J Cancer Sci Ther*. 2016;8:104.
115. Álvarez-Bañuelos MT, et al. Prognostic factors associated with survival in women with breast cancer from Veracruz, Mexico. *J Cancer Sci Ther*. 2016;8:092-098.
116. Ahmed S, et al. Effect of surgery and adjuvant therapy in reproductive and sexual dysfunction in pre-menopausal women with breast cancer. *Reprod Syst Sex Disord*. 2016;5:169.
117. Martínez-Campa C, et al. Melatonin: antiproliferative actions and protection of normal tissue and enhancement of radiosensitivity of breast cancer cells. *J Cell Sci Ther*. 2016;7:241.
118. Márquez-Rosales MG, et al. Association of the rs2279744 promoter polymorphism in the MDM2 gene with breast cancer in a mexican population. *Heredity Genet*. 2016;5:165.
119. Moses SL, et al. Cytotoxicity in MCF-7 and MDA-MB-231 breast cancer cells, without harming MCF-10A healthy cells. *J Nanomed Nanotechnol*. 2016;7:369.
120. Dogan S, et al. The detection of extremely high and low expressed genes by EGEF algorithm in invasive breast cancer. *J Biom Biostat*. 2016;7:286.
121. Sinha S, et al. Predictive and prognostic factors in breast cancer and their association with ER PR HER2/neu expression. *J Carcinog Mutagen*. 2016;7:263.
122. Rios SDS, et al. Wearing a tight bra for many hours a day is associated with increased risk of breast cancer. *Adv Oncol Res Treat*. 2016;1:1.
123. Luo S, et al. Two novel curcumin analogues induced reactive oxygen species generation and mitochondrial-related apoptosis in human breast cancer MCF-7 Cells. *J App Pharm*. 2016;8:215.
124. Fentiman IS, et al. Medico-legal aspects of delay in diagnosis of breast cancer. *Cancer Surg*. 2016;1:103.
125. Taira N, et al. Cohort study of secondary endocrine therapy in metastatic breast cancer with a poor response to initial endocrine therapy. *J Clin Trials*. 2016;6:260.
126. Entesab AHM, et al. How do breast cancer mortality rates differ between women who are screened annually and biennially by mammography. *J Gen Pract*. 2016;4:244.
127. Ohnaru K, et al. Atypical femoral fracture in a patient with metastatic breast cancer during denosumab therapy. *J Clin Case Rep*. 2016;6:737.
128. Shokoufi M, et al. Periodic dynamic thermography for breast cancer assessment. *J Bioengineer & Biomedical Sci*. 2016;6:181.
129. Zribi M and Boujelbene Y. The neural networks with an incremental learning algorithm approach for mass classification in breast cancer. *Biomedical Data Mining*. 2016;5:118.
130. Târcoveanu E, et al. Particularities of primary breast cancer in men. *Surgery*. 2016;12:1.
131. Bae JM, et al. Human mammary tumor virus (HMTV) infection and risk of human breast cancer: an adaptive meta-analysis for case-control studies. *J Micro Biotech*. 2016;5.
132. Aydin AA, et al. A rare case of primary breast cancer with isolated renal parenchymal metastasis mimicking primary renal cell carcinoma. *J Clin Case Rep*. 2016;6:724.
133. Lucibello M and De Braud F. Phospho-TCTP and dihydroartemisinin: a novel therapeutic opportunity in advance breast cancer. *Chemotherapy (Los Angel)*. 2016;5:196.

134. Novoa AG and Nebri BA. Controversies in axillary treatment of breast cancer patients and metastatic sentinel lymph node. *J Cancer Sci Ther.* 2016;8:392.
135. Ofor O, et al. CTCF may not directly regulate mRNA expression in the ER+ MCF7 breast cancer cell line. *J Cancer Sci Ther.* 2016;8:391.
136. Shahbazi S, et al. Semiempirical investigation of the postmenopausal breast cancer treatment potential of xanthone derivatives. *Nat Prod Chem Res.* 2016;4:206.
137. Olaya N, et al. Bovine leukemia: zoonosis associated with breast cancer in humans. *J Med Surg Pathol.* 2016;1:110.
138. Minafra IP, et al. Proteomic profiling of in-vitro bone-conditioned skbr3 breast cancer cells. *J Proteomics Bioinform.* 2016;9:075-083.
139. Mukherjee G, et al. Analysis of clinico-pathological characteristics of indian breast cancers shows conservation of specific features in the hormone receptor sub-types. *J Integr Oncol.* 2016;5:159.
140. Akihiko Osaki, et al. Adjuvant chemotherapy with s-1 in breast cancer patients after primary systemic chemotherapy. *Cancer Chemotherapy (Los Angel).* 2016;5:187.
141. Ondimu TO, et al. Factors that influence the uptake of breast cancer screening among secondary school student: case of kisii south sub-county kenya. *Oncol Cancer Case Rep.* 2016;2:109.
142. Smichkoska S and Lazarova E. Long term trastuzumab in metastatic setting of the patients with HER2 positive breast cancer. *Breast Can Curr Res.* 2015;1:103.
143. Colone M, et al. Redox-active microcapsules as drug delivery system in breast cancer cells and spheroids. *J Mol Genet Med.* 2016;10:200.
144. Kadmon I, et al. Breast cancer - a developing paradigm of nursing care in Israel. *J Nurs Care.* 2016;5:331.
145. Grech G, et al. Molecular classification of breast cancer patients using formalin-fixed paraffin-embedded derived RNA samples. *J Mol Biomark Diagn.* 2016;S8:016.
146. Xu X, et al. Molecular mechanisms underlying chemotaxis in the model system dictyostelium discoideum and mammalian neutrophils and breast cancer cells. *Cell Dev Biol.* 2015;4:E135.
147. Das U, et al. Breast cancer in women of younger than 35 years: a single center study. *J Mol Biomark Diagn.* 2015;6:261.
148. Basu A, et al. Advances of non-surgical therapy for different molecular subtypes of breast cancer. *Adv Genet Eng.* 2015;4:132.
149. Oargens OMDC, et al. Defining contentment in quality of life in the context of breast cancer experience: a meta-synthesis. *J Palliat Care Med.* 2015;5:239.
150. Ratna A and Das SK. Endothelin: ominous player in breast cancer. *J Cancer Clin Trials.* 2016;1:e102.
151. Singh A and Arora D. A case of breast cancer recurrence at the match line. *Breast Can Curr Res.* 2015;1:101.