

A photograph of two women walking on a sandy beach. The woman on the left is wearing a white lab coat over a green top and white pants. The woman on the right is wearing a pink button-down shirt and light-colored pants. They are both smiling and looking towards the right. The background shows the ocean and a cloudy sky.

SIEMENS

Women's health depends on a lifetime
of answers—one test at a time.

Women and Breast Cancer

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Answers for life.

Women and Breast Cancer

Breast cancer is among the top-six cancers attributed to the most deaths on a global basis. Breast cancer causes more than 450,000 deaths each year.¹

Breast cancer is the most commonly diagnosed cancer in women² and the second-leading cause of cancer death among women.³ If detected early, when the cancer is localized in the breast, five-year survival statistics are approximately 98%.⁴



What Is Breast Cancer?

Breast cancer forms in the tissue of the breast—in the ducts (the tubes that transport milk to the nipple) or in the lobules (where milk is made).^{3,5,6}

Many breast cancers can be estrogen-, progesterone-, or HER-2/neu-positive, which causes the cancer to grow.

HER-2/neu positivity is associated with more-aggressive disease, decreased overall survival, and a higher probability of recurrence.^{6,7}

The Global Burden of Breast Cancer in Women

- Breast cancer comprises 10.5% of all new cancers worldwide.⁸
- 1.4 million women globally are diagnosed with breast cancer each year.⁸
- By 2020, there will be over 1.7 million new cases of breast cancer annually⁸
- In 2009, breast cancer resulted in an economic burden of \$28.4 billion.⁸



Gender Differences

While males can be diagnosed with breast cancer, incidence levels among males are very low.⁵

Risk Factors

There are numerous modifiable and non-modifiable risk factors for the development of breast cancer:

- Age—women over 50 years
- Gender
- Reproductive history, such as menstruation before 12 years, first pregnancy after 30 years, never having given birth, or menopause before 50 years
- Family history
- Gene mutations, such as BRCA1 and BRCA2
- Alcohol consumption
- Obesity
- Insufficient exercise
- Race/ethnicity—Caucasian persons are more at risk
- Hormone replacement

Symptoms⁹

Breast cancer symptoms present in a variety of ways, and some people have no signs or symptoms. Breast cancer may be diagnosed after a routine mammography.

Signs or symptoms of breast cancer include changes in the breast, such as:

- Lump in the breast or armpit
- Thickening/swelling
- Irritation or dimpling of skin
- Nipple indention or pain
- Nipple discharge other than breast milk (including blood)
- Change in size or shape
- Any pain

Related Diseases and Conditions

There is evidence that predisposition to other cancers, such as ovarian cancer, can occur in women carrying gene mutations (BRCA1, BRCA2).

Siemens solutions for breast cancer testing

	ADVIA Centaur® Systems	ADVIA® Chemistry Systems	Dimension® RxL Max®/ Xpand® Plus Systems	Dimension® EXL™ Systems	Dimension Vista® Systems	IMMULITE® Systems	Other Siemens Systems	Siemens Imaging Systems
Detection								•
Monitoring/Management								•
BR 27.29	•							
CA 15-3	•				•	•		
CEA	•				•	•		
HER-2/neu	•							
Potassium		•	•	•	•			
Sodium		•	•	•	•			
Creatinine		•	•	•	•			
Alanine Aminotransferase		•	•	•	•			
Albumin		•	•	•	•			
Alkaline Phosphatase		•	•	•	•			
Bilirubin		•	•	•	•			
Lactate Dehydrogenase		•	•	•	•			
Calcium		•	•	•	•			
Chloride		•	•	•	•			
CRP		•	•	•	•			
Gamma-glutamyltransferase		•	•	•	•			
Uric Acid		•	•	•	•			
Hemoglobin							•	
Leukocytes							•	
Thrombocytes							•	

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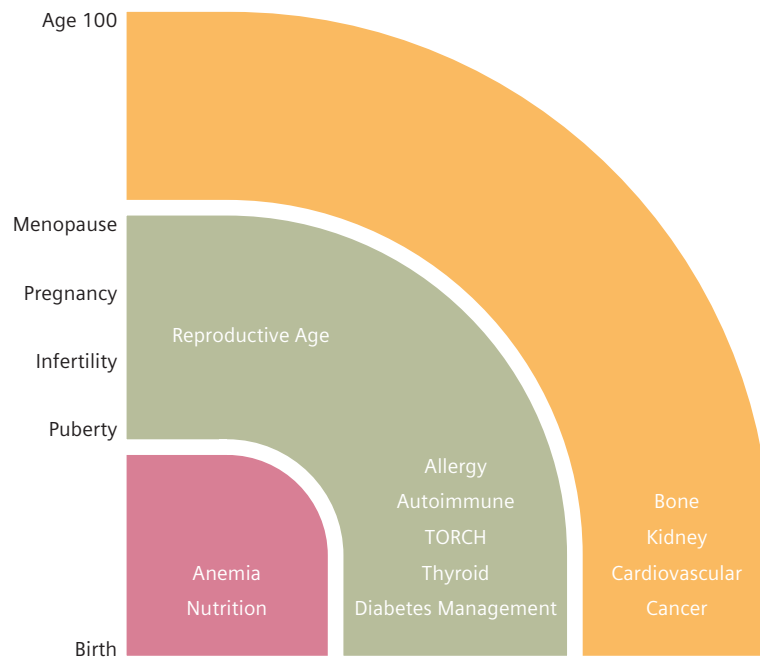
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Caring for Women with Breast Cancer

Reducing the burden of breast cancer in women includes understanding risk factors, making rapid, accurate diagnoses when symptoms occur, implementing appropriate therapies, and monitoring treatment.

As an integrated diagnostics company, Siemens' comprehensive solutions, which include multiple imaging modalities, follow the complete continuum of breast cancer care, including risk assessment and early prevention, diagnosis, therapy, and aftercare. In addition, our solutions in healthcare information technology support the exchange of data for making informed decisions.

Women's Lifetime Health Continuum





Your results. Her lifetime.

**Empowering you to advance the
health and vitality of women
throughout the continuum of life.**

Siemens Healthcare Diagnostics, a global leader in clinical diagnostics, provides healthcare professionals in hospital, reference, and physician office laboratories and point-of-care settings with the vital information required to accurately diagnose, treat, and monitor patients. Our innovative portfolio of performance-driven solutions and personalized customer care combine to streamline workflow, enhance operational efficiency, and support improved patient outcomes.

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