GLOSSARY

| Background incidence rate | The breast cancer incidence rate expected in the absence of screening. |
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| Breast awareness | Breast awareness programmes are intended to encourage women to be conscious of how their breasts normally look and feel, so that they can recognize and report any abnormality, with the goal of improving breast cancer survival by detecting breast cancer at an early stage. |
| Breast cancer detection rate | The number of histologically proven malignant lesions of the breast, in situ (ductal only, not lobular) and invasive, detected at screening per 1000 women. |
| Breast cancer incidence rate | The rate at which new cases of breast cancer occur in a population. The numerator is the number of newly diagnosed cases of breast cancer that occur in a defined period. The denominator is the population at risk of a diagnosis of breast cancer during this defined period, sometimes expressed as person-time at risk during that period. |
| Breast cancer mortality rate | The rate at which deaths from breast cancer occur in a population. The numerator is the number of breast cancer deaths that occur in a defined time period. The denominator is the population at risk of dying from breast cancer during this defined period, sometimes expressed as person-time at risk during that period. |
| Breast cancer register | A record of information on all new cases of breast cancer and deaths from breast cancer that occur in a defined population. |
| Breast cancer survival rate | The percentage of women in a study group who are still alive for a certain period of time after they were diagnosed with breast cancer. The survival rate is often stated as the 5-year survival rate, which is the percentage of women in a study who are alive 5 years after their diagnosis. |
| Breast density | The relative proportion of radiodense mammary collagen-rich stromal tissues in the breast, as opposed to the lower-density adipose tissue. Commonly referred to as "mammographic density". |
| Breast self-examination | An examination of a woman's breasts by the woman herself, purportedly for early detection of breast cancer. |
| Clinical breast examination | A detailed examination of a woman's breasts by a health-care professional (i.e. nurse, physician, or surgeon) for early detection of breast cancer. (See also "Physical breast examination".) |
| Effectiveness | A measure of the extent to which screening, when deployed in the field under real conditions, does what it is intended to do for a specified population. The most important indicator of the effectiveness of a screening programme is its effect in reducing breast cancer mortality. |
| Efficacy | The extent to which screening produces a beneficial result under ideal conditions. Randomized controlled trials, which are conducted to initially assess whether screening works, assess efficacy by estimating a primary outcome, such as reduction in breast cancer mortality in the study arm compared with the control arm. |
| Eligible population | The adjusted target population, i.e. the target population minus those women who are excluded according to screening policy on the basis of eligibility criteria other than age, sex, and geographical location. |

| False positive | A test result indicating that a person has breast cancer when the person does not have breast cancer. |
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| Incremental cancer detection rate | The number of additional cancers detected at screening with a particular modality relative to another. This is often stated as a percentage of screens or as a rate per 1000 screens. |
| Interval cancer | A primary breast cancer diagnosed in a woman who had a result in a screening test, with or without further assessment, that was negative for malignancy, either (i) before the next invitation to screening was due or (ii) within a period equal to a screening interval for a woman who has reached the upper age limit for screening. |
| Interval cancer rate | The number of interval cancers diagnosed within a defined period since the last negative result in a screening examination, per 1000 women with negative results. |
| Invasive breast cancer | Invasive carcinoma of the breast is a malignant tumour, commonly adenocarcinoma, part or all of which penetrates the basement membrane of the mammary epithelial site of origin, particularly from the terminal duct lobular unit. |
| Lead time | The period between when a cancer is found by screening and when it would have been detected from clinical signs and symptoms (not directly observable) in the absence of screening. |
| Length bias | The bias towards detection of cancers with longer sojourn times, and therefore a better prognosis, by screening. |
| Opportunistic screening | Screening outside an organized or population-based screening programme, as a result of, for example, a recommendation made during a routine medical consultation, a consultation for an unrelated condition, on the basis of a possibly increased risk of developing breast cancer (family history or other known risk factor), or by self-referral. Opportunistic screening relies on individual health-care providers taking the initiative to offer screening or to encourage individuals to participate in a screening programme, or to undertake screening outside the context of any programme. |
| Organized screening | Screening programmes organized at national or regional level, with an explicit policy, a team responsible for organization and for health care, and a structure for quality assurance. |
| Overdiagnosis | The diagnosis of a breast cancer as a result of screening that would not have been diagnosed in the patient's lifetime if screening had not taken place. |
| Participation rate | The number of women who have a screening test as a proportion of all women who are invited to attend screening. |
| Physical breast examination | An examination of the breast performed to differentiate normal breast tissue from possibly cancerous breast tissue. The term is often used to mean specifically "clinical breast examination" (see this term). |
| Positive predictive value | The proportion of all positive results at screening that lead to a diagnosis of cancer. |
| Prevalence | The proportion of a population that exhibits a disease (classified as cases) at a single point in time. Approximately the product of the incidence and the average duration of the disease. |
| Recall | The physical recall of women to the screening unit, as a consequence of the screening examination, for (i) a repeat mammogram because of technical inadequacy of the screening mammogram (technical recall) or (ii) clarification of a perceived abnormality detected at screening, by performance of an additional procedure (recall for further assessment). |
| Recall rate | The number of women recalled for further assessment as a proportion of all women who were screened. |
| Refined mortality | The breast cancer mortality rate ascertained specific to the diagnostic period, excluding women in whom breast cancer was diagnosed before screening began. |
| Screening interval | The fixed interval between routine screenings decided upon in each programme, depending on screening policy. |
| Screening policy | A policy for a specific screening programme that defines the targeted age and sex group, the geographical area, and other eligibility criteria; the screening test and interval (usually 2 or 3 years); and requirements for payment or co-payment, if applicable. As a minimum, the screening protocol and repeat interval and determinants of eligibility for screening are stated. |
| Screening test | A test applied to all women participating in a programme. In mammography screening, it usually consists of a bilateral, two-view mammogram with or without clinical examination. |

| Sensitivity | The proportion of truly diseased persons in the screened population who are identified as diseased by the screening test. The more general expression for "sensitivity of the screening programme" refers to the ratio of true positives (breast cancers correctly identified at the screening examination) / [true positives + false negatives (breast cancers not identified at the screening examination, detected as interval cases)]. |
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| Sojourn time | The preclinical detectable phase; the duration during which a tumour is detectable by screening but before clinical signs and symptoms appear (not directly observable). |
| Specificity | The proportion of truly non-diseased persons in the screened population who are identified as non-diseased by the screening test (i.e. true negatives / [true negatives + false positives]). |
| Stage shift | A shift of the stage distribution of the tumours detected towards a lower stage. |
| Target population | The age-eligible population for screening, for example all women offered screening according to the policy. |
| Unrefined mortality | The breast cancer mortality rate regardless of the time of diagnosis. |