

How high is the radiation dose?

X-rays are used in mammography. The radiation dose is kept as low as possible during mammography screening and is not allowed to exceed prescribed levels. Compressing the breast during an examination enables the radiation dose to be kept at a particularly low level. This compression does not cause cancer.

However, it cannot be ruled out that, in rare cases, the radiation dose can contribute to the development of cancer when X-rays are taken regularly.

The digital equipment used meets high quality standards and is checked on a daily basis.

Talking to a doctor about the mammography screening programme



You have a right to be given more information by a doctor working in the mammography screening programme. Talking with the doctor gives you the opportunity to discuss any questions you have on mammography screening.

Please contact the Invitation Centre to make a separate appointment. Details can be found in the invitation or on the back of this flyer.

Quality assured in mammography screening

The medical quality of the mammography screening programme is world-class. This has been confirmed by the European certification organization EUREF.



For more answers on the mammography screening programme, see



www.mammo-programm.de (in German only)
fragen.mammo-programm.de/en/ (in English)

DOCTOR'S SURGERY STAMP

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Making an informed decision

The early detection programme for breast cancer



Why are women offered mammography in a quality-assured screening programme?

Women between the ages of 50 and 69 have the highest risk of getting breast cancer. Studies have shown that women who regularly take part in quality-assured mammography screening can be saved from dying of breast cancer.

So far, no other method of early detection for breast cancer has been shown to be so effective.

Mammography as part of the screening programme helps in the early detection of breast cancer. It is therefore intended for all women in a particular age group who have no recognisable signs of breast cancer.

The screening is offered every two years to women between the ages of 50 and 69.

In order to guarantee the high quality necessary in the screening, it is only carried out in specialized facilities (screening units) approved for the German mammography screening programme. Doctors and radiology specialists have to meet particular professional requirements. Working methods and test results are regularly examined and evaluated.

The costs of the examination are borne by the statutory health insurance funds. If you have private medical insurance, please clarify the issue of costs with your medical insurance provider in advance.

**MAMMOGRAPHIE
SCREENING
PROGRAMM**

Does mammography screening make sense as a form of early detection?

In a mammography the breast is X-rayed. This makes even very small malignant changes in the breast tissue visible. In most cases, this also applies to dense breast tissue.

Around 75 percent of carcinoma discovered are smaller than 2 centimetres in size and have not yet spread to the lymph nodes. At this stage, carcinomas cannot generally be detected by touch.

The size of the tumour and the extent to which the lymph nodes are affected are among the key factors determining chances of recovery. At the early stage, breast-conserving surgery and less invasive forms of treatment, using medication, are possible.

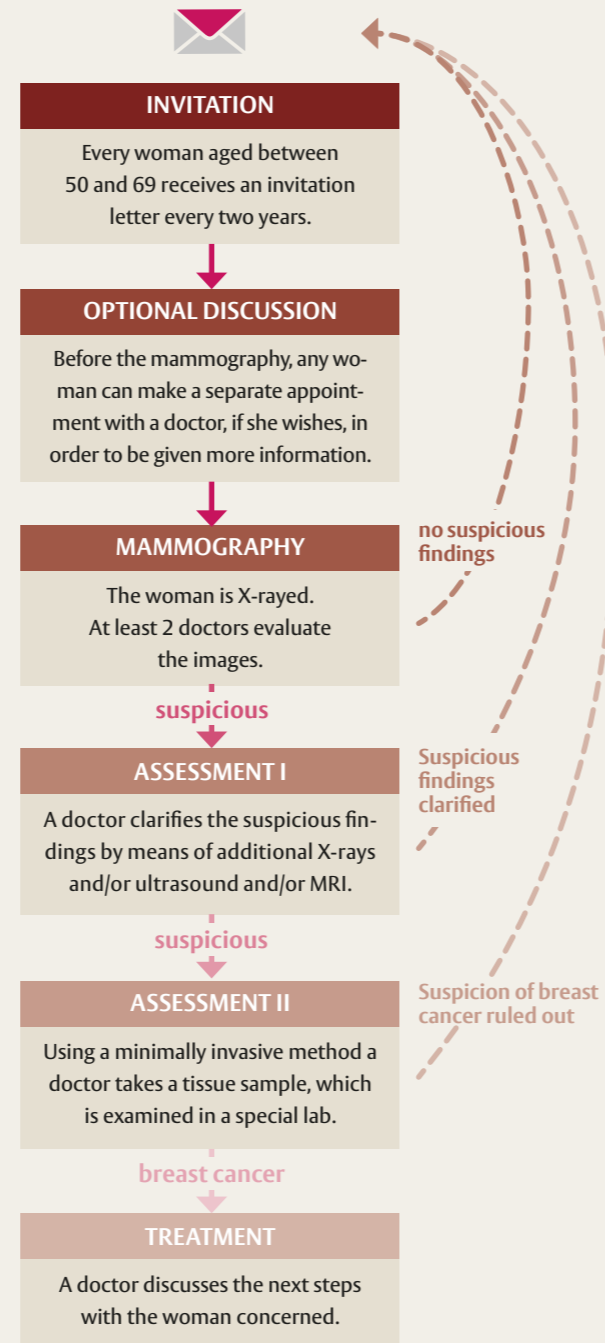
Of 1,000 women who regularly take part in the mammography screening programme, between 2 and 6 are saved from dying of breast cancer.

Any early-detection method also has disadvantages. Any suspicious findings need to be checked in additional tests – which can lead to temporary anxiety for the woman concerned.

Early detection also discovers small tumours or precancerous conditions which would not have been noticed – and, as a result, not have been treated – without this test (overdiagnoses, overtherapies). One reason is that there are tumours which grow slowly, or not at all. It is not possible to predict with any certainty whether any tumour discovered will continue to grow. Therefore, and after a discussion with the patient, treatment is generally recommended.

Of 1,000 women who regularly take part in the mammography screening programme, between 9 and 12 can receive an overdiagnosis.

Procedure in a mammography screening programme



How often are women asked to come and have an additional test?

In mammography screening, there are always two specially trained doctors who evaluate the X-rays, independently of each other. In doing so, they also look at any previous X-rays taken. This independent double reading of the mammographies is a special feature of the screening programme.

If the doctors discover anything suspicious on a mammography X-ray, the images are discussed in a conference involving a further specialist doctor from the mammography screening programme. A final assessment is then made.

If breast cancer is still suspected, the woman concerned soon receives an invitation to come for another diagnosis. This includes carrying out an additional mammography X-ray and/or ultrasound and/or magnetic resonance imaging (MRI) on the breast. In most cases, the suspicious findings in the breast can be classified as benign.

In some cases, breast cancer cannot be ruled out. This means that the tissue then has to be examined. For this purpose, and working in a minimally invasive way, a sample of the tissue is removed. The sample is examined in a lab specializing in such work. The result is provided within a few days. Breast cancer is confirmed in around half of the tissue samples taken.

Of 1,000 women who take part in the mammography screening programme,

- **970 are notified that there are no suspicious findings.**
- **30 are notified that the findings are suspicious.**
 - ▶ **11 of these women have a tissue sample taken.**
 - ▶ **6 of these women are told after the examination of their tissue that they have breast cancer**

Every year around 16,600 malignant tumours are detected in the quality-assured German mammography programme.

Are there alternatives to the mammography screening programme?

Other methods for the early detection of breast cancer are sometimes offered to women, including ultrasound tests on the breast or magnetic resonance imaging (MRI). It is not clear, however, whether these tests reduce the risk of dying of breast cancer. These tests can lead to suspicious findings more often than mammography does, and such findings may require additional tests or biopsies before they subsequently turn out to be harmless.



Can breast cancer also be detected between two mammography screenings?

Taking part regularly in mammography screening cannot prevent breast cancer from developing. In around 2 out of every 1,000 women whose mammography findings were not suspicious, breast cancer is detected before their next invitation to a screening. In most cases, the cancer detected has grown only since the last screening. Also, in rare cases and in spite of all the care taken, it is possible for tumours to be invisible or be missed in the mammography.

This is why it is important that you should contact your doctor immediately if you notice any changes in your breast.