Information about the MAMMOGRAPHY SCREENING

A programme for the early detection of breast cancer in women between the ages of 50 and 69
WHAT IS IT ABOUT?

You are given this leaflet with the invitation to the mammography screening. It is intended to provide you with general information about breast cancer as well as about the possibilities for the early detection of breast cancer. Based on this informational leaflet, you can make your own decision whether or not you would like to accept the invitation. Participation in the programme is voluntary.

If you are between 50 and 60 years of age, you are entitled to a mammography every two years for the early detection of breast cancer. The costs are paid for by the statutory health insurance and you do not have to pay a practice fee. If you have private health insurance, please ask your health insurance company about the assumption of costs.

Screening means that all people of a certain age group are offered a specific examination. In the mammography screening the female breasts are X-rayed. The objective of the examination is to detect breast cancer as early as possible, in order to be able to treat it successfully. However, this does not prevent breast cancer from developing.

WHAT CHARACTERISES THE PROGRAMME?

A mammography screening programme was established in Germany with the greatest effort. The mammography programme is a further offer in addition to the annual cancer check-up by the gynaecologist.

The mammography screening programme in Germany meets the strict quality criteria of the „European Guidelines“:

→ The mammography is performed by specialists on modern, strictly monitored devices.

→ Every mammography image is examined by at least two doctors, who evaluate the mammographies of at least 5000 women annually.

→ Abnormal results are clarified by doctors with special advanced training within the early detection programme.
WHAT IS BREAST CANCER?

When breast tissue cells start to divide themselves uncontrollably, cancer may grow, invade healthy tissue and develop tumours, so called metastases. Each year approx. 57,000 women are diagnosed as having breast cancer in Germany. Between the ages of 50 and 69, around one out of every 20 women has been affected. The average age of onset is 63 years. Approx. 17,500 women die of breast cancer every year, one out of every 80 women between the ages of 50 and 69.

Breast cancer is more diversified than almost any other type of cancer. Some types of breast cancer develop slowly and rarely tend to grow metastases, others can be very aggressive.

The so called ductale carcinoma in situ (DCIS) is a common tumour type. It can be easily discovered during a mammography and it only develops into a dangerous tumour in one out of three cases. Since one cannot predict which one of them will develop, all cases of DCIS are treated.

WHAT ARE THE RISK FACTORS?

The risk of developing breast cancer increases as one gets older. If your mother, your daughter or sister is affected by breast cancer - your risk is doubled. If two relatives are affected, the risk is quadrupled. The following factors are also known to increase or reduce the risk of breast cancer: excessive alcohol consumption, X-rays, medication for hormone therapy during the menopause as well as excess weight after the menopause can all lead to an increased risk of developing breast cancer. However, breast feeding reduces the risk. Psychological factors, such as one’s personal attitude, joy of life or stress are irrelevant.

HOW IS THE SCREENING DONE?

The letter inviting you to the screening examination is sent to you by the so-called “Central Office”. It receives your date of birth and your address from the local resident registration office.

The examination takes place at a location of the screening unit in your region, sometimes also in especially equipped vehicles. A screening unit is supervised by specifically trained and experienced doctors.

Taking a mammography image – just like any other X-ray examination – belongs to the tasks of medical X-ray specialists. In order to be able to work in the screening programme, they must have special qualifications. If you have a medical question on location that your X-ray assistant is not able to answer, you are offered an appointment with a doctor.

For the examination, the X-ray assistant takes two images of each of your breasts. In doing so, your breasts are pressed flat between two plates. The flatter the breast is, the lower the radiation dosage and the clearer the image will be. This can be unpleasant or also painful. It does not cause cancer.
WHAT HAPPENS AFTER THE EXAMINATION?

The mammography images are evaluated carefully during the next few days. Two doctors analyse the images millimetre by millimetre independent of one another. In doing so, they are not to overlook any alterations, if possible but are also not to rate a harmless shadow as an abnormal result. Abnormal results are discussed with another specialist. All those responsible know that the waiting period can be strenuous for you. You should receive the letter with the results within seven work days after the examination. Sometimes however, there can be unpredictable delays. In most cases, the images will not show any abnormal results. Then you will receive the next invitation for a mammography in two years. But please remember: In spite of all diligence, a malignant tumour may not be visible in the mammography or it may grow during the next two years until the next examination. In rare cases, the tumour may also not be detected by both doctors independent of one another.

You should consult a doctor on your own if you detect any changes in your breasts while waiting for the next mammography, for example:

- knots, dents or hardening of the skin that can be felt,
- visible deformation, skin changes or the retraction of a nipple,
- bleeding or other discharge from the nipple.

WHAT HAPPENS AFTER AN ABNORMAL RESULT?

If the doctors detect a suspicious or unclear result, you are called back in to clarify the results. The breast is specifically X-rayed or examined using ultrasound. If the result cannot be clarified, the retrieval of a tissue sample is recommended. Under local anaesthesia, a thin hollow needle is inserted through the skin to the abnormal area. Using this needle, several small tissue cylinders are retrieved. This so-called punch biopsy is a small procedure and in nearly all cases does not lead to any complications. The retrieved tissue material is then examined under the microscope by a specifically trained pathologist.

In the past people believed that the disease would get worse if the tumour cells were spread by the needle. This, as well as the fear that the additional supply of oxygen would initiate a growth spurt of the tumour, was not able to be confirmed.
It is also important how you rate the advantages and disadvantages for yourself personally, meaning if certain advantages or disadvantages are more important to you than others.

A disadvantage is

- if an abnormal result, which turns out to be harmless later on, is a cause for worry, particularly if tissue is sampled that subsequently turns out to be benign,
- if a malignant tumour is found and treated, which is incurable and thus the span of suffering is increased but not the span of lifetime,
- if a tumour is found and treated which would have never caused problems.

An advantage is

- if a malignant tumour is treated in a gentler manner because of its early detection and for example the breast can be maintained and chemotherapy is not required,
- if a malignant tumour is found in a treatable stadium, which would have led to death without the examination.

**WHAT ARE THE ADVANTAGES AND DISADVANTAGES?**

A screening mammography – like any medical procedure – has advantages and disadvantages. In order to have significant advantages and as few disadvantages as possible, the quality-assured mammography screening programme was implemented. The majority of the specialists assume that this programme has more advantages than disadvantages for the women who participate. Experiences from countries such as the Netherlands, Great Britain and Sweden, in which a screening programme has been being offered for quite some time now, confirm this. That is the reason why Germany implemented such a programme as well.

Your individual balance of advantages and disadvantages may however deviate from the average balance. The reason for this: By tendency the advantages are more significant for women with a particularly high number of risk factors and by tendency they are less significant for women with a particularly small number of risk factors.

All in all, approximately five out of six abnormal results can be classified as harmless. Then the same applies as after an inconspicuous mammography: You will receive the next invitation in two years but should of course take changes which occur seriously.

Should the suspicion of breast cancer be confirmed however, the doctor of the screening unit will discuss further procedures with you. Your family doctor or gynaecologist will of course also care for you.
WHAT CAN YOU EXPECT PRECISLEY?

The following numbers which are based on experiences from other countries and scientific studies are intended to give you a clear idea of how advantages and disadvantages are approximately distributed statistically over the entire programme:

→ from 200 women who participate in the mammography screening programme every two years for over 20 years, 140 women do not receive abnormal results in 20 years. 60 women receive results which should be followed up on.

→ from these 60 women, 40 receive an “all-clear” in the follow-up exam, 20 women are recommended to have a tissue sample taken.

→ from these 20 women, 10 of the suspicions turn out to be unfounded. 10 women are diagnosed with breast cancer in the screening; from the remaining 190 women, 3 women are also diagnosed with breast cancer in the 20 years between two screening rounds.

→ from this total of 13 women with the diagnosis breast cancer, 3 women die of breast cancer, 10 women do not die of breast cancer.

→ from these 10 women, 1 woman would not have known about her breast cancer during her lifetime without the mammography, 8 women would also have been treated successfully without participating in the mammography screening programme – some of them however, with a more aggressive therapy. 1 of 200 women is saved from dying of breast cancer thanks to her regular participation.

WHAT HAPPENS TO YOUR DATA?

All those involved in the screening make sure that your data is treated with the greatest possible confidentiality and reliability. Unauthorised establishments or persons are not able to access your data. Your data is made anonymous for the scientific evaluation of the programme. The early cancer detection guideline of the Joint Federal Committee regulates how the data is to be collected, processed and how long it is to be stored. Furthermore, the rights to information (§§6, 19 and 34 Federal Data Protection Act resp. §83 Social Code X) and to the correction, deletion, or blocking (§§20 and 35 Federal Data Protection Act resp. §84 Social Code X) determined in the Federal Data Protection Act (German: BDSG) and the Social Code (German: SGB) are applicable.
This information is available in other languages at www.mammo-programm.de

Further information is also available at www.mammo-programm.de or at the office responsible for the invitations (Central Office). Your central office will gladly answer questions regarding your invitation.

The Joint Federal Committee (German: G-BA) according to §91 section 5 Social Code V enacts the early cancer detection guideline. This can be viewed on the website of the Joint Federal Committee.

The leaflet is an integral part of the early cancer detection guideline (resolution dated December 15, 2003) and provides information regarding the reasons, objectives, contents, procedure and data protection of the programme for the early detection of breast cancer.

www.mammo-programm.de
www.g-ba.de