

High-Precision Radiotherapy for Breast Cancer

Breast cancer is the most common form of cancer among women. In Germany alone, more than 57,000 women are affected annually, according to the German Society for Cancer Aid. Following breast-preserving surgeries, radiotherapy constitutes an indispensable part of the therapy concept. Studies have shown that the probability of relapse of the cancer can be reduced substantially through irradiation of the breast.

After completing a successful operation, the goal of radiotherapy is to remove minute remnants of tumours, involved lymph nodes or tiny metastases that could not be eliminated through surgery. In doing so, it is of the utmost importance that the tumour is irradiated with high precision, while avoiding the surrounding, healthy tissue such as the lungs or heart. Moreover, during the irradiation in the breast region, the tumour movements induced through breathing must also be taken into account.

State-of-the-art treatment

At its centre for high-precision radiotherapy, the MediClin Robert Janker Klinik uses state-of-the-art methods for treating cancer. The specialized clinic has further enhanced its stereotactic radiotherapy through the Varian Silhouette irradiation system.

Our state-of-the-art radiotherapy systems facilitate:

- The application of a concentrated, high dosage of irradiation to a precisely defined target area.
- Through the high precision, the irradiated area can be reduced significantly.
- Consequently, the radiation exposure on the surrounding, healthy tissue and adjacent organs is minimized.
- The radiotherapy is painless.

With this technology, we are able to treat:

■ **After a breast-preserving operation:**

The radiotherapy is used as a supportive measure (adjuvant) after surgery. Normally, radiotherapy begins three weeks after the operation at the earliest, when the surgical wound has healed and the patient's general health permits.

■ **After a mastectomy:**

Post-surgical radiotherapy, also for cases where the breast has been removed, can reduce the probability of relapse, irradiating the chest wall and the surgical scars.

■ **Before an operation:**

The irradiation of larger tumours before an operation can also help to reduce their size. Following this type of so-called neo-adjuvant radiotherapy, breast-preserving surgery can become more probable, particularly if this would otherwise not have been possible due to the size of the tumour.

■ **Primary radiotherapy – without surgery:**

If there is a high operative or anaesthetic risk due to older age or concomitant disorders, radiotherapy on the breast can be carried out as the sole treatment. This can also be the case when the patient does not wish to have surgery.

■ **Radiotherapy on lymph nodes:**

Radiotherapy can also be used in cases where metastases are found in the underarm lymph vessels above and below the clavicle.

■ **Radiotherapy on metastases:**

In advanced stages of illness, radiotherapy can also be a treatment option, for instance against bone metastases.

Quality through interdisciplinary cooperation

In addition to the state-of-the-art medical technology as well as over 70 years of experience, the MediClin Robert Janker Klinik is distinguished through its interdisciplinary exchange between radiotherapists and the oncologists in the area. By bringing together out- and inpatient therapy, our competence in the individual treatment of breast cancer has been enhanced even further.

The network of care at our specialized clinic for high-precision radiotherapy offers patients considerable advantages in the course of the entire treatment. Accordingly, prompt, efficient coordination is made possible among the specialists. From the radiological diagnostic to the therapy stage, the treatment plan is thoroughly coordinated with regard to duration, substance and location. For our patients, this close cooperation means shorter distances and less waiting time, while avoiding redundant and unnecessary examinations.