



Treatment of Breast Cancer

INTRABEAM 600 from ZEISS



Seeing beyond

Localized tumor control, gentle and precise – targeted applications for breast cancer treatments

In recent years, a new approach has been gaining ground in the treatment of breast cancer. Radical surgical methods are being replaced by less-invasive, breast-conserving therapy. Such a trend is now also appearing in radiotherapy. For certain patients, radiation oncologists are moving away from the current, largely standardized treatment plan to risk-adapted, tailored radiotherapy using intraoperative radiation therapy (IORT).

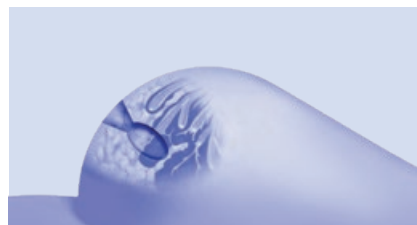
- With IORT the tumor bed is irradiated after tumor removal, intraoperatively.
- Depending upon your patient, local irradiation of the tumor bed can be prescribed as a single treatment or as a boost treatment combined with external beam radiotherapy.¹
- IORT irradiates the tumor bed, which can be frequently missed due to postoperative changes or oncoplastic reconstruction.
- IORT can also be used in settings where oncoplastic techniques are performed.²
- IORT offers selected patients the possibility of a second breast-conserving treatment.^{3, 4}



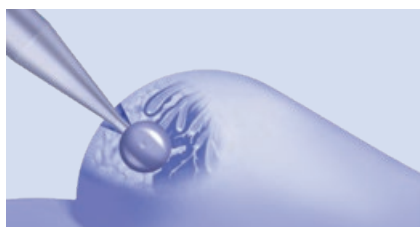
1 The position of the tumor is determined.



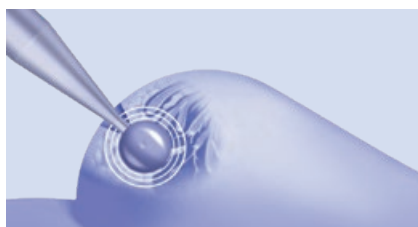
2 During surgery a minimally invasive access point is created.



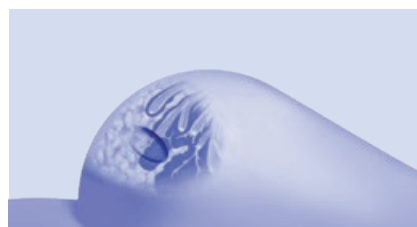
3 The tumor is surgically removed.



4 The correct size (ø) of the applicator is determined and the applicator is positioned in the tumor bed.



5 The tumor bed is locally irradiated for about 30 minutes.



6 The applicator is removed and the incision closed.



The targeted, intraoperative dose of radiation with IORT from ZEISS is a risk-adapted therapeutic solution.



The clinical rationale

Unlike traditional irradiation, IORT from ZEISS can be adapted to the needs of the patient: local irradiation of the tumor bed can be prescribed as a single treatment or as a boost treatment combined with external beam radiotherapy. The standard approximate six weeks of post-op irradiation may be reduced. IORT occurs directly after resection and irradiates the tumor bed which could otherwise be missed due to postoperative changes or oncoplastic reconstruction.



Adapt the radiation to the needs of your patients

To irradiate the tumor bed, e.g. in breast-conserving treatment for breast cancer patients, ZEISS offers a complete range of applicators in different shapes, sizes and diameters. This versatility enables the physician to exactly adapt the emitted radiation beam to the form and size of the tumor bed.

Literature References

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- 2 Malter, W., Kirn, V., Richters, L., Fridrich, C., Markiefka, B., Bongartz, R., ... Kraemer, S. (2014). Intraoperative Boost Radiotherapy during Targeted Oncoplastic Breast Surgery: Overview and Single Center Experiences. *International Journal of Breast Cancer*, 1–6.
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