

Electron-Based Intraoperative Radiation Therapy (IORT)

If you receive an early-stage breast cancer diagnosis and would like to consider breast-conserving surgery, ask about electron-based intraoperative radiation therapy (IORT). Avera Cancer Institute Sioux Falls is one of only eight cancer centers in the United States to offer this innovative and effective treatment option.

What Is IORT?

IORT provides a concentrated dose of radiation directly to the breast tumor site at the time of surgery. You'll find two IORT clinical trials at Avera:

- Lumpectomy followed by electron-based intraoperative radiation therapy as a single, full dose partial breast irradiation for early stage, node negative, invasive breast cancer (NCT02370797) Single Fraction
- Hypofractionated whole-breast irradiation preceded by intraoperative radiotherapy with electrons as anticipated boost (NCT01343459) HIOB

Learn more about [IORT](#).

Am I Eligible for IORT?

If you receive a diagnosis for early stage invasive breast cancer and are a woman over the age of 40, you may be eligible for IORT.

Where Can I Receive IORT?

If you're eligible, you can receive IORT treatment at [Avera Cancer Institute Sioux Falls](#) under the guidance of primary investigators [Julie Reiland, MD](#) and [Kyle Arneson, MD](#).

How Do I Benefit from IORT?

As a recipient of IORT and participant in Avera's clinical trial, you receive radiation directly to the tumor bed. While you may or may not directly benefit from taking part in the study you will provide knowledge for future patients.

What Time Commitment Is Required To Receive IORT?

If you choose to receive IORT, it will require minimal additional visits outside of your routine breast cancer care plan. Your treatment may include:

- Visits with your radiation oncologist – after a whole breast radiation – at months one, five, 13 and then annually for six years (HIOB study)
- Visits with your radiation oncologist – after surgery – at one month and then every three months for the first year, every six months for years two through five and then annually for years six through 10 (Single Fraction study)

How Can I Get More Information About IORT?

The purpose of this study is to test the safety and efficacy of intraoperative radiation therapy in treating breast cancer. For more information, call the [Avera Cancer Institute Navigation Center](#) at **888-422-1410** or Heidi Nickles at **605-322-3295**.