# An integrated optimization of Surgery and radioTherApy techniques to impRove cosmetic outcome and quaLity of life In breast conserviNG therapy for breaSt cancer patient

No registrations found.

| Ethical review        | Not applicable             |
|-----------------------|----------------------------|
| Status                | Pending                    |
| Health condition type | -                          |
| Study type            | Observational non invasive |

### Summary

#### ID

**NL-OMON22078** 

Source NTR

Brief title STARLINGS study

Health condition

Breast cancer

### **Sponsors and support**

Primary sponsor: Erasmus MC Source(s) of monetary or material Support: Stichting BeterKeten

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

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The primary focus of this project will be to determine which different combinations of (oncoplastic reconstructive) surgery and radiotherapy techniques, in the context of breast conserving therapy for (pre-invasive) breast cancer, contribute the most to the development of fibrosis.

#### Secondary outcome

To assess the relation between the presence and severity of fibrosis, cosmetic outcome and different QoL domains and symptoms.

# **Study description**

#### **Background summary**

One in seven women will be diagnosed with breast cancer at some point during life. The majority of patients (60-70%) can be treated with breast conserving therapy consisting of lumpectomy (instead of mastectomy) combined with a sentinel node procedure or axillary lymph node dissection, followed by irradiation of the breast. A lot of patients also receive chemotherapy.

As life expectancy after breast cancer treatment has become substantially longer due to improved multimodality treatment, late adverse effects of the treatment affecting quality of life (QoL) have become increasingly important. Unfortunately, breast fibrosis occurs as a late adverse event in a substantial subset of patients (10-30%) after breast conserving therapy for DCIS or breast cancer. Fibrosis can be painful and may result in poor cosmetic outcome. Fibrosis as well as poor cosmetic outcome can negatively affect QoL. Besides patient and tumor related factors, both surgery and radiotherapy play a role in the risk of developing fibrosis.

Both surgical and radiation oncologists aim for the best cosmetic outcome and QoL of each patient, without compromising oncological safety. However, especially in the light of current oncoplastic reconstructive surgery techniques, it has not yet been properly investigated how the different surgery and radiotherapy techniques interact.

The primary focus of this project will be to determine which different combinations of (oncoplastic reconstructive) surgery and radiotherapy techniques, in the context of breast conserving therapy for (pre-invasive) breast cancer, contribute the most to the development of fibrosis. Second, to assess the relation between the presence and severity of fibrosis, cosmetic outcome and different QoL domains and symptoms.

#### **Study objective**

Surgical and radiation oncologists aim for the best cosmetic outcome and QoL of each patient, without compromising oncological safety. However, especially in the light of current oncoplastic reconstructive surgery techniques, it has not yet been properly investigated how the different surgery and radiotherapy techniques interact.

#### Study design

4-6 years after treatment (1 time point)

## Contacts

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# **Eligibility criteria**

### **Inclusion criteria**

• Female patients aged  $\geq$  18 years

• History of BCT with adjuvant radiation therapy for non-metastatic, histologically proven invasive breast cancer (pT1-3N0-2a) or DCIS. In light of BCT adjuvant systemic treatment (i.e. endocrine therapy, chemotherapy and immune therapy) is allowed.

• Breast conserving surgery between 1st of January 2016 and 31th of December 2018

• Treated according to the currently applied dose fractionation schedules, i.e. whole breast radiotherapy, with or without boost

• Adequate understanding of the Dutch language and written informed consent

### **Exclusion criteria**

- Any breast surgery or re-irradiation on the breast area after BCT
- Progression of disease (and additional treatment) since BCT
- Patients who received partial breast irradiation
- Current pregnancy or breast feeding

# Study design

### Design

| Study type:         | Observational non invasive |
|---------------------|----------------------------|
| Intervention model: | Other                      |
| Allocation:         | Non controlled trial       |
| Masking:            | Open (masking not used)    |
| Control:            | N/A , unknown              |

### Recruitment

| NL                        |             |
|---------------------------|-------------|
| Recruitment status:       | Pending     |
| Start date (anticipated): | 20-09-2021  |
| Enrollment:               | 750         |
| Туре:                     | Anticipated |

### **IPD** sharing statement

Plan to share IPD: Undecided

### **Ethics review**

Not applicable Application type:

Not applicable

# **Study registrations**

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

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### In other registers

| Register | ID                              |
|----------|---------------------------------|
| NTR-new  | NL9840                          |
| Other    | METC Erasmus MC : MEC-2021-0829 |

# **Study results**