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Titel onderzoek

Breast-contour preserving procedures for early stage breast cancer: a population-based comparison between the Netherlands (NBCA) and Denmark (DBCG).

Predictors for delay in time from diagnosis to treatment: a population-based comparison between the Netherlands (NBCA) and Denmark (DBCG).

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Beschrijving onderzoek

Breast cancer is the most common type of malign neoplasm in high-income countries, with an incidence up to 14.000 patients in the Netherlands and 4.400 patients in Denmark. Both countries are reporting high-quality breast cancer care by systematically registering and uniformly monitoring quality indicators and hospital comparison on a nationwide level. All patients with invasive breast cancer are registered in the NABON Breast Cancer Audit (NBCA) in the Netherlands since 2011. New insights in potentially underperforming indicators, different treatment trends or short-term outcome differences are difficult to identify

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as quality monitoring and feedback is mostly derived from its own national benchmark. Comparison of data between the DBCG and the NBCA on an international level could identify differences in treatment trends and short-term outcomes and potentially could lead to higher quality of breast cancer care in both countries. 72% of all patients with breast cancer are diagnosed with early-staged breast cancer. These patients have a relatively better prognosis in comparison to patients with locally advanced breast cancer. Breast-contour preservation is increasingly important in the last decade. Furthermore, timely initiation of neoadjuvant therapy and surgery is advocated.

All female patients diagnosed with invasive early-stage (T1-2 N0-1 M0) breast cancer between January 2012 and December 2016 are included for analysis. Information regarding diagnostic procedures, surgery, reconstructive surgery, radiotherapy, neo-adjuvant and adjuvant systemic treatment will be analysed. Patients with locally advanced breast cancer or metastatic disease are excluded.

All statistical analyses will be performed with SPSS (IBM- SPSS, Inc., Chicago, IL). A p-value of ≤ 0.05 is considered statistically significant and all tests are two-sided. Patient, tumour, treatment descriptive statistics and wait times will be analysed stratified by country of diagnosis. Breast-contour preservation is categorized as primary lumpectomy, neoadjuvant chemotherapy followed by lumpectomy and mastectomy followed by immediate breast reconstruction. Variables affecting breast-contour preservation are analysed in a multivariable logistic model. Time to treatment from diagnosis till first treatment will be analysed in a continuous variable. Propensity score matching will additionally be performed to adjust for differences in included patients in both registries. Hereby, the impact of the country will be more reliable as the comparison is made with the same patient groups.

The results of this research will be published in a peer review journal.