

Søknadsinformasjon

Utlysning	Nordic Cancer Union Research Grant, 2015
Søknad	NORDCAN development; Differences in cancer survival in the Nordic countries: the role of stage at presentation, treatment, comorbidity and education
Søknadsid	176615
Innsendt av	Gerda Engholm

Oppgave: Progress report

Tilordnet	Gerda Engholm
Status	Løst
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Briefly describe the project in a language understandable to non-scientists

The Nordic cancer statistics database, NORDCAN, provides easily accessible information on cancer incidence, mortality, prevalence and survival over calendar time. Earlier studies have documented variations between the Nordic countries in cancer incidence and survival. To improve the understanding of the underlying causes, additional information is needed on possible contributing factors such as stage at presentation, treatment and co-morbidity. This project focuses on stage at presentation. UICC, the international union of cancer registries, has introduced classifications for stage at diagnosis, TNM, which defines measures for size of tumour, regional spread and metastatic spread with separate rules for each cancer site. The classifications are recommended for use by clinicians and implemented in guidelines for deciding the primary treatment. The aim of the project is to collect, validate and compare the existing TNM-registration and compare stage-specific survival between countries.

Summarize the major findings of the project

We have got permission from the Danish Data Protection Agency to collect, analyse and store the wished additional information at the NORDCAN secretariat. TNM data was for most countries received along with the data for 2014-update of NORDCAN, but still with no data from Finland. Cleaning of data and preparation of evaluation and construction and comparison of summary measures for TNM-stage in 4 categories plus different types of missing data, are still ongoing and will be followed by comparison of stage-specific survival.

The Swedish and the Danish Cancer registries started registration of TNM in 2004, but it has not yet been evaluated. TNM is registered in the new clinical databases at the Norwegian Cancer Registry, and Iceland has also started collection of TNM for some cancer sites. The Cancer Registry of Finland receives very few TNM registrations. TNM can be recorded as clinical stage, cTNM, and pathological or post-surgical stage, pTNM.

Preliminary results show a change in stage distribution for Danish breast cancer and colorectal cancer patients in connection with introduction of screening programmes from 2007 and 2014, respectively, to be more comparable to the Swedish distribution.

A problem is that information on metastatic spread often is missing. This information should be known at treatment decision, but a missing value is often used anyway by clinicians. Different use of a missing category over time and between countries pose a problem in the interpretation of differences in stage-distribution, but also stage-specific survival due to selection bias.

We have not been able to finish the project within time, but hope to finish it during spring-summer 2017.

Project plan for spring-summer 2017

- Further validation of the transformations of T, N and M to TNM-stage and decision on the best use of both clinical and pathological TNM.
- Calculations and presentation of stage-distribution and stage-specific survival over time.
- Planning and writing of a report as a basis for a peer-reviewed paper.
- One to two Nordic meetings to write the report and plan further activities to establish the pan-Nordic platform.
- The report should be ready and presented at the ANCR-symposium in August 2017

Describe how the project has increased our knowledge of the prevention, cause and/or cure for cancer

We do not know which factors are the more important behind the survival differences between countries. Hypotheses for the poorer Danish survival have been more unfavorable stage-distribution, differences in guidelines for treatment, less treatment for older patients and higher population prevalence of risk factors like smoking, alcohol consumption, overweight and physical inactivity, resulting in higher comorbidity in Denmark, but we need more solid, available and comparable population based information on the clinical factors.

Outline how Nordic cooperation has added value to this project

Supplementing Cancer Register information with TNM-stage as done here and subsequently with treatment and co-morbidity information based on common rules, can form a pan-Nordic platform for studies of the role of these clinical factors which been suggested to represent important contributors to the observed variation in cancer survival, including the observed poorer cancer outcomes in Denmark. Based on recent reports from other, heterogeneous regions and our findings to date, the Nordic countries are particularly well positioned to create such a platform.

Brief overview of expenditures for last year 1 vedlegg (Expenditures for 2016 and plan 2017, NORDCAN development.docx)