PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	The Finnish National Esophago-Gastric Cancer Cohort (FINEGO)
	for studying outcomes after oesophageal and gastric cancer surgery:
	a protocol for a retrospective, population-based, nationwide cohort
	study in Finland
AUTHORS	Kauppila, Joonas; Ohtonen, Pasi; Karttunen, Tuomo; Kokkola, Arto;
	Laine, Simo; Rantanen, Tuomo; Ristimäki, Ari; Räsänen, Jari;
	Saarnio, Juha; Sihvo, Eero; Toikkanen, Vesa; Tyrväinen, Tuula

VERSION 1 – REVIEW

REVIEWER	Masayuki Watanabe
	The Cancer Institute Hospital of Japanese Foundation for Cancer
	Research, Tokyo, Japan.
REVIEW RETURNED	02-Jul-2018
GENERAL COMMENTS	The authors plan a population-based nationwide retrospective study to establish baseline data on national and regional trends in oesophageal and gastric cancer in Finland. This is a study of great
	significance and further sub-studies will be planned.
REVIEWER	Giacopuzzi Simone
	Upper GI surgery, University of Verona, Italy
REVIEW RETURNED	25-Jul-2018
GENERAL COMMENTS	the study protocol proposed by the authors is a population-based, nationwide retrospective cohort study with the purpose of providing information on the recent time trends in the treatment of oesophageal and gastric cancer and identifying factors related to morbidity, mortality and survivorship after surgery. The study is of considerable interest and I believe that the possibility of using such accurate national databases as a study tool can provide valuable results on "real life". The study is well written and the limits are adequately emphasized. However, I would like to stress that the objectives of the study
	should be treated in a more detailed way; furthermore, the overall objective is too generic (valid for any medical study protocol), pretentious and it is not closely related to the analysis that the authors want to lead.
REVIEWER	Francesco Cavallin Independent statistician, Solagna, Italy
REVIEW RETURNED	31-Aug-2018
GENERAL COMMENTS	I congratulate the authors for such important and interesting project. The introduction of nationwide disease-specific registries are

increasing worldwide, aiming at overcoming well-known challenges such as large registries containing few patient data at national/regional level and small hospital-based registries containing detailed patient data at local level.

The protocol is focused and well written. The strengths of the project are clear and the (few) limitations are frankly discussed. Appropriate measures for data security and protection, and for quality check are indicated.

In the introduction, the authors report the well-known trend of pesophageal adenocarcinoma, pesophageal squamous cell

In the introduction, the authors report the well-known trend of oesophageal adenocarcinoma, oesophageal squamous cell carcinoma and gastric cancer in Western countries (including Finland). Since the authors are planning to collect data referring to a large time span, they may be interested in investigating possible trends occurred during time (i.e. changes in patient characteristics and tumor features at diagnosis). Moreover, quasi experimental designs such as interrupted time series analysis may be useful to evaluate the effect of past interventions in health policy in Finland. These are suggestions for future use of data, and do not require a reply by the authors.

REVIEWER	B.J. Noordman
	Erasmus MC - University Medical Center Rotterdam, Netherlands
REVIEW RETURNED	19-Sep-2018

GENERAL COMMENTS	I his seems a good initiative, although it is not new. Multiple
	comparable national and international registries exist. As such a
	registry for esophagogastric cancer has not yet been initiated in
	Finland, results seem especially interesting for national evaluation of

surgical treatment.

A major issue is the retrospective design of the study. Comparable registries use a prospective design, which improves quality of data. Why not collect data prospectively?

Another important issue seems exclusion of patients who do not undergo surgery. This induces substantial selection bias and limits oncological analyses. Data seems principally useful for postoperative outcomes. This is currently being investigated internationally with large sample sizes in the ECCG collaborative. The main research objective is "to reduce mortality and morbidity associated to oesophageal and gastric cancer, and to improve survivorship after oesophageal and gastric cancer diagnosis". It is unclear how results from this study will do this.

Please elaborate on collection and quality of clinical data. Who will retrieve data? Who will be responsible for data collection? How will quality of data be guaranteed? Will data be audited?

How will data be made accessible? Who can access data? Can (inter)national researchers file study proposals? Is there a central reviewer committee who will review study proposals and/or data requests? If so, who are the members of this committee and how do they control the data? How will authorships of proposals be determined?

I expect that local permission from all participating centers is necessary to collect their clinical data. Have all local PIs committed participation?

Please add complete study protocol to submission.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Masayuki Watanabe

Institution and Country: The Cancer Institute Hospital of Japanese Foundation for Cancer

Research, Tokyo, Japan.

Competing Interests: None declared

Q1: The authors plan a population-based nationwide retrospective study to establish baseline data on national and regional trends in oesophageal and gastric cancer in Finland. This is a study of great significance and further sub-studies will be planned.

Authors' response: We thank for the positive overall evaluation and encouraging comments.

Reviewer: 2

Reviewer Name: Giacopuzzi Simone

Institution and Country: Upper GI surgery, University of Verona, Italy

Competing Interests: None declared

Q1. the study protocol proposed by the authors is a population-based, nationwideretrospective cohort study with the purpose of providing information on the recent time trends in the treatment of oesophageal and gastric cancer and identifying factors related to morbidity, mortality and survivorship after surgery. The study is of considerable interest and I believe that the possibility of using such accurate national databases as a study tool can provide valuable results on "real life".

The study is well written and the limits are adequately emphasized. However, I would like to stress that the objectives of the study should be treated in a more detailed way; furthermore, the overall objective is too generic (valid for any medical study protocol), pretentious and it is not closely related to the analysis that the authors want to lead.

Authors' response: We thank for the reviewer comments and the overall favourable evaluation. We agree that the objectives are not informative enough.

Revisions: We have revised the objectives of the study into a more concrete form (page 7).

Reviewer: 3

Reviewer Name: Francesco Cavallin

Institution and Country: Independent statistician, Solagna, Italy

Competing Interests: None declared

Q1. I congratulate the authors for such important and interesting project. The introduction of nationwide disease-specific registries are increasing worldwide, aiming at overcoming well-known challenges such as large registries containing few patient data at national/regional level and small hospital-based registries containing detailed patient data at local level.

The protocol is focused and well written. The strengths of the project are clear and the (few) limitations are frankly discussed. Appropriate measures for data security and protection, and for quality checkare indicated.

In the introduction, the authors report the well-known trend of oesophageal adenocarcinoma, oesophageal squamous cell carcinoma and gastric cancer in Western countries (including Finland). Since the authors are planning to collect data referring to a large time span, they may be interested in investigating possible trends occurred during time (i.e. changes in patient characteristics and tumor features at diagnosis). Moreover, quasi experimental designs such as interrupted time series analysis may be useful to evaluate the effect of past interventions in health policy in Finland. These are suggestions for future use of data, and do not require a reply by the authors.

Authors' response: We thank for the reviewer comments and the overall favourable evaluation. We are grateful for the suggestions for future studies.

Reviewer: 4

Reviewer Name: B.J. Noordman

Institution and Country: Erasmus MC - University Medical Center Rotterdam, Netherlands

Competing Interests: None declared

Q1. This seems a good initiative, although it is not new. Multiple comparable national and international registries exist. As such a registry for esophagogastric cancer has not yet been initiated in Finland, results seem especially interesting for national evaluation of surgical treatment.

A major issue is the retrospective design of the study. Comparable registries use a prospective design, which improves quality of data. Why not collect data prospectively?

Authors' response: We acknowledge the limitations of the retrospective study design. However, we have some arguments to justify the retrospective data collection:

1. The absolute incidence (number) of these cancers per year is low in Finland. Therefore, the current study design allows us to collect a significant number of these patients in a relative short time span, in contrast to waiting for 30 more years to achieve a similar number of patients, or long-enough follow-up.

VERSION 2 - REVIEW

REVIEWER	Noordman, BJ
	Erasmus MC - University Medical Center Rotterdam, Netherlands
REVIEW RETURNED	27-Oct-2018
GENERAL COMMENTS	All comments have been adressed adequately.