

# Nordic trial of nasogastric tube use after operations for cancer in the gullet

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<b>Registration date</b> 09/12/2021	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 13/08/2025	<b>Condition category</b> Surgery	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

The mainstay of curative treatment of cancer in the esophagus (gullet) is surgical resection with a part of the stomach used for replacement of the resected esophagus. In Scandinavia, a nasogastric tube (NG tube) is generally left in place after surgery but the clinical benefits and potential harms of this practice are unclear and because esophageal surgery is laden with feared complications, especially leak on the connection between the stomach remnant and the esophagus (anastomotic leak), many surgeons are reluctant to abandon old routines. We hypothesized that abstaining from NG-tube use is non-inferior to using NG-tube after esophagectomy regarding anastomotic leak and overall complications.

### Who can participate?

Adult patients undergoing esophagectomy for cancer in Scandinavia

### What does the study involve?

Patients will be randomly allocated to one of two groups, with an equal chance of being in either group (like tossing a coin), to either have a nasogastric tube kept in place after surgery or have this tube removed immediately after surgery.

### What are the possible benefits and risks of participating?

The potential benefits of participation are less postoperative discomfort for patients not having an NG tube, but also possibly fewer complications. The potential risks are a slightly higher complication rate.

### Where is the study run from?

Uppsala University (Sweden)

### When is the study starting and how long is it expected to run for?

From July 2020 to December 2030

### Who is funding the study?

Swedish Cancer Foundation (Sweden)

Who is the main contact?  
Dr Jakob Hedberg, jakob.hedberg@surgsci.uu.se

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Jakob Hedberg

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## Additional identifiers

**Clinical Trials Information System (CTIS)**  
Nil known

**ClinicalTrials.gov (NCT)**  
Nil known

**Protocol serial number**  
Nil known

## Study information

**Scientific Title**  
A randomized controlled trial: nasogastric-tube post-esophagectomy complications

**Acronym**  
Kinetic

**Study objectives**  
Omitting the use of nasogastric tube after resection for esophageal cancer with a gastric conduit, is non-inferior to current practice (postoperative nasogastric tube decompression)

**Ethics approval required**  
Old ethics approval format

## Ethics approval(s)

1. Approved 12/10/2021, Etikprövningsmyndighetens (Box 2110, 75002 Uppsala, Sweden; +46 (0) 10-475 0800; [registrator@etikprovning.se](mailto:registrator@etikprovning.se)), ref: 2021-03761
2. Approved 21/07/2021, REK sør-øst B (Gullhaugveien 1-3, 0484 Oslo, Norway; +4722 84 55 11; [rek-sorost@medisin.uio.no](mailto:rek-sorost@medisin.uio.no)), ref: 256722
3. Approved 27/06/2022, Center for Sundhed (De Videnskabsetiske Komiteer Blegdamsvej 60, 1. sal, opgang 94A11 2100 København, Denmark; +45 (0)38666395), ref: H-21069333
4. Approved 16/12/2021, The Ethical Committee of Northern Ostrobothnia (the regional medical research ethics committee of the wellbeing services county of North Ostrobothnia, Kajaanintie 50 (NK-sisääntynti), OYS Tutkimuspalveluyksikkö N5 (huone N5 133, 1. krs), 90220 Oulu, Finland; +358 (0)50 448 4955; [eettintoimikunta@pohde.fi](mailto:eettintoimikunta@pohde.fi)), ref: EETTMK 85/2021 266§

## Study design

Interventional randomized controlled trial

## Primary study design

Interventional

## Study type(s)

Treatment

## Health condition(s) or problem(s) studied

Nasogastric tube decompression after resection for esophageal cancer with gastric conduit reconstruction

## Interventions

Participants will be allocated to either the intervention or control group. Allocation provided by online randomization with stratification for center, sex, and neck anastomosis (y/n).

Intervention: Immediate postoperative removal of nasogastric tube

Control: 5-day use of nasogastric tube (current practice).

## Intervention Type

Procedure/Surgery

## Primary outcome(s)

Incidence of an anastomotic leak measured using CT scan with peroral contrast at 7 days and data accrual in an eCRF by 6 weeks post-surgery

## Key secondary outcome(s)

1. Incidence of pneumonia measured using data accrual in an eCRF by 6 weeks post-surgery
2. Overall complications measured using data accrual in an eCRF by 6 weeks post-surgery
3. Length of stay measured using data accrual in an eCRF by 6 weeks post-surgery
4. Health-related quality of life measured using structured interviews at discharge and 6 weeks post-surgery
5. Survival measured using review of survival information in relevant linked registries at 5 years
6. C-reactive protein (CRP) level measured using data accrual of CRP levels in the first 7 postoperative days in an eCRF by 6 weeks post-surgery

## Completion date

31/12/2030

# Eligibility

## Key inclusion criteria

1. Histopathologically confirmed esophageal or GEJ cancer in locally advanced stages (cT1a N+ or cT1b-4a any N; M0) and considered technically resectable by the local tumor board
2. Age  $\geq 18$  years
3. Planned for esophagectomy with gastric conduit reconstruction
4. Written informed consent

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Adult

## Lower age limit

18 years

## Sex

All

## Total final enrolment

448

## Key exclusion criteria

1. No resection performed (reason specified)
2. Alternative reconstruction method used (Roux-limb/colonic interponate)
3. Surgeon choosing to leave NG-tube (reason specified)
4. No ability to understand the study in terms of risk and benefits (including language difficulties)

## Date of first enrolment

21/01/2022

## Date of final enrolment

27/03/2024

# Locations

## Countries of recruitment

Denmark

Finland

Norway

Sweden

**Study participating centre**  
**Uppsala University Hospital**  
Akademiska Sjukhuset  
Uppsala  
Sweden  
75185

**Study participating centre**  
**Karolinska Sjukhuset**  
Karolinska University Hospital  
Stockholm  
Sweden  
17176

**Study participating centre**  
**Umeå University**  
Norrlands Universitetssjukhus  
Umeå  
Sweden  
901 89

**Study participating centre**  
**Örebro Universitet**  
Örebro Universitetssjukhus  
Örebro  
Sweden  
701 85

**Study participating centre**  
**Linköpings Universitet**  
Linköping University Hospital  
Linköping  
Sweden  
581 91

**Study participating centre**  
**Lund University**  
Skane University Hospital

Lund  
Sweden  
221 85

**Study participating centre**  
**The arctic University of Norway**  
University Hospital of Northern Norway  
Tromsø  
Norway  
9038

**Study participating centre**  
**Norwegian University of Science and Technology**  
St Olavs Hospital  
Trondheim  
Norway  
7006

**Study participating centre**  
**Oslo University**  
Oslo University Hospital  
Oslo  
Norway  
0424

**Study participating centre**  
**University of Copenhagen**  
Copenhagen University Hospital  
Copenhagen  
Denmark  
2100

**Study participating centre**  
**University of Southern Denmark**  
Odense University Hospital  
Odense  
Denmark  
5000

**Study participating centre**  
**Oulu University**  
Oulu University Hospital  
Oulu  
Finland  
90220

## Sponsor information

**Organisation**  
Uppsala University

**ROR**  
<https://ror.org/048a87296>

## Funder(s)

**Funder type**  
Charity

**Funder Name**  
Swedish Cancer Foundation (Salary, PI, CAN 2017/1086)

## Results and Publications

### Individual participant data (IPD) sharing plan

Due to legal restrictions regarding patient data in the participating countries, no raw data can be disseminated in this trial.

### IPD sharing plan summary

Not expected to be made available

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		31/07/2025	13/08/2025	Yes	No
<a href="#">Protocol article</a>		16/02/2024	19/02/2024	Yes	No
<a href="#">Abstract results</a>		02/09/2024	30/09/2024	No	No
<a href="#">Protocol file</a>	version 2.7	06/12/2021	09/12/2021	No	No
<a href="#">Protocol file</a>	version 4.0	08/01/2025	13/01/2025	No	No