NUtritional Support in Patients with newly diagnosed oEsophageal Cancer

Submission date	Recruitment status	Prospectively registered
11/05/2011	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
10/06/2011	Completed	Results
Last Edited	Condition category	[] Individual participant data
10/06/2011	Cancer	[] Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Ate Van der Gaast

Contact details

S-Gravendijkwal 230 Rotterdam Netherlands 3015 CE

Additional identifiers

Protocol serial number

Onc. 2.C/C

Study information

Scientific Title

NUtritional Support in Patients with newly diagnosed oEsophageal Cancer: a randomised, double blind, controlled clinical trial

Acronym

NUSPEC

Study objectives

The active sip feed is expected to beneficially change pre-treatment immune function in patients with newly diagnosed cancer of the oesophagus compared to routine nutritional support.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Medical Ethics Committee of the Erasmus (Medisch Ethische Toetsings Commissie Erasmus MC), Rotterdam, Netherlands approved on 14th June 2007, reference number: MEC-2007-109

Study design

Randomised double blind controlled trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Oesophageal cancer

Interventions

Duration of intervention: 4 weeks pre-treatment

Active products: Nutritionally complete oral supplement, high in protein and leucine and enriched with fish oil, specific oligosaccharides and a balanced mix of vitamins, minerals and trace elements.

Active products:

- 1. Body weight loss in past 3 months is 0 to < 5% or weight gain and dysphagia score is 0 or 1: Active sip feed (2 x 200 mL daily)
- 2. Body weight loss in past 3 months 5% or more and/or dysphagia score 2 or 3 and/or patients using/prescribed sip feed in the last 4 weeks: Active sip feed (at least 2 x 200 mL daily)

Control products: The control product is either a non-caloric placebo product or an iso-caloric standard nutritional product, both without fish oil enrichment or specific oligosaccharides.

Routine Care (Control products):

- 1. Body weight loss in past 3 months is 0 to < 5% or weight gain and dysphagia score 0 or 1: Placebo sip feed (2 x 200 mL daily)
- 2. Body weight loss in past 3 months 5% or more and/or dysphagia score 2 or 3 and/or patients using/prescribed sip feed in the last 4 weeks: iso-caloric control sip feed (at least 2 x 200 mL daily)

Intervention Type

Drug

Phase

Drug/device/biological/vaccine name(s)

Nutritional feeds

Primary outcome(s)

To assess the effects of the Active sip feed on pre-treatment immune function in patients with newly diagnosed cancer of the oesophagus and to compare this with the effects of routine nutritional support.

Immune function was measured by the ex vivo production of Th1/Th2 cytokines in ConA stimulated peripheral blood mononuclear cells (PBMC) and production of inflammatory cytokines and prostaglandin E2 (PGE2) in lipopolysaccharides (LPS)-stimulated PBMC, both at visit 1 and visit 3. Cytokines were measured by Bio-Plex assay and PGE2 by enzyme immunoassay (EIA).

Key secondary outcome(s))

- 1. To assess the effects of the Active sip feed on pre-treatment nutritional status in patients with newly diagnosed cancer of the oesophagus and to compare this with the effects of routine nutritional support.
- 2. To obtain exploratory information on immune function and nutritional status post-surgery
- 3. To obtain data on immune and nutritional parameters in healthy volunteers to allow for adequate interpretation of the data from patients

Completion date

01/02/2009

Eligibility

Key inclusion criteria

Patients:

- 1. Newly diagnosed with carcinoma of the oesophagus or gastro-oesophageal junction (Siewert-Stein classification type I III)
- 2. Age more than or equal to 18 years
- 3. Written informed consent.

Reference group (were included for baseline comparisons, no intervention in these subjects):

- 1. Age and sex-matched with the Dutch oesophagus cancer population
- 2. Written informed consent
- 3. Body mass index (BMI) 18.5-30 kg/m2

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

Sex

All

Key exclusion criteria

Patients:

- 1. Life expectancy < 3 months
- 2. Planned start of cancer treatment within 3 weeks
- 3. Eastern Cooperative Oncology Group (ECOG) performance status > 2
- 4. Any oesophagus related surgery after diagnosis before inclusion
- 5. Chemo- and/or radiotherapy in the past 5 years
- 6. Altered immune function [e.g. caused by major active infection, autoimmune disease, active allergy, rheumatoid arthritis, inflammatory bowel diseases, multiple sclerosis, or by use of medication such as immunosuppressive drugs, immunomodulators, or corticosteroids (unless not considered to be systemically available)]
- 7. Dysphagia score of 4 using the dysphagia scoring system
- 8. Dependence on tube feed or parenteral nutrition in the last 4 weeks
- 9. Use of fish oil containing supplements during the last 4 weeks
- 10. Intolerance or allergy to dairy, fish, or other ingredients of the study products
- 11. Dependency on fibre free diet
- 12. If pre-menopausal female: pregnant or lactating
- 13. Dementia or altered mental status that would prohibit the understanding and giving of informed consent
- 14. Any other medical condition that may interfere with the safety of the patient or the outcome parameters, in the investigators judgment.
- 15. Investigators uncertainty about the willingness or ability of the patient to comply with the protocol requirements (e.g. alcohol abuse)

Reference group (were included for baseline comparisons, no intervention in these subjects):

- 1. Significant involuntary weight loss in the past year
- 2. Smoking (defined as currently smoking or quit less than or equal to 6 months ago)
- 3. Acute or chronic disease
- 4. Altered immune function [e.g. caused by major active infection, autoimmune disease, active allergy, rheumatoid arthritis, inflammatory bowel diseases, multiple sclerosis, or by use of medication such as immunosuppressive drugs, immunomodulators, or corticosteroids (unless not considered to be systemically available)]
- 5. If pre-menopausal female: pregnant or lactating
- 6. Any other condition that may interfere with the definition healthy volunteer according to the investigators judgement

Date of first enrolment

01/08/2007

Date of final enrolment

01/02/2009

Locations

Countries of recruitment

Netherlands

Study participating centre S-Gravendijkwal 230 Rotterdam Netherlands 3015 CE

Sponsor information

Organisation

Danone Research (Netherlands)

ROR

https://ror.org/01c5aqt35

Funder(s)

Funder type

Industry

Funder Name

Danone Research (Netherlands)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet

Participant information sheet 11/11/2025 11/11/2025 No

Yes