# Psychiatric and cognitive function in patients with Neuroendocrine tumours with carcinoid syndrome.

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This study aims to assess impairments in cognition and psychiatric function in ileal NET patients and relate this to 5-HT metabolism, by investigating the relation between psychiatric and cognitive function of ileal M1 NET patients to peripheral 5-...

Ethical review	Approved WMO
Status	Recruiting
Health condition type	Other condition
Study type	Observational non invasive

# Summary

## ID

NL-OMON45631

**Source** ToetsingOnline

**Brief title** Psychiatric and cognitive function in patients with NET.

## Condition

- Other condition
- Mood disorders and disturbances NEC

**Synonym** cognitive impairment, depression

#### **Health condition**

cognitieve stoornissen

#### **Research involving**

Human

## **Sponsors and support**

#### Primary sponsor: Nederlands Kanker Instituut Source(s) of monetary or material Support: geen

## Intervention

**Keyword:** carcinoid syndrome, cognitive function, neuroendocrine tumour, psychiatric function

### **Outcome measures**

#### **Primary outcome**

To assess the severity of cognitive dysfunction and depressive symptoms in

ileal NET patients and to relate this to peripheral 5-HT production.

#### Secondary outcome

- To assess the prevalence of formal psychiatric diagnoses (depressive

disorder, anxiety disorder) in patients with metastatic ileal NET and relate

this to peripheral 5-HT production

- To assess the severity of irritability and anger in patients with metastatic ileal NET and to relate this to peripheral 5-HT production.

- To identify subgroups of patients with metastatic ileal NET that are more

vulnerable for depressive symptoms (e.g. with a (family) history of depression

or a polymorphism in serotonin transporter genes).

- To assess the prevalence of cognitive problems on specific domains in patients with metastatic ileal NET and relate this to peripheral 5-HT production.

- To assess the emotional bias in NET patients and to relate this to 5-HT production, depressive symptoms and irritability

- To assess the association between psychiatric symptoms and cognitive

impairment and peripheral 5-HT production.

- To assess the quality of life of the patients and to relate this to

peripheral 5-HT

# **Study description**

#### **Background summary**

Patients with neuroendocrine tumours (NET) report cognitive problems and psychiatric symptoms such as depressed mood, anxiety and irritability. These problems and symptoms are thought to be related to cerebral shortage of the serotonin precursor tryptophan, that is depleted by peripheral overproduction by the tumour. The clinical manifestation of serotonin (5-HT) overproduction (diarrhoea, flushes and wheezing) is known as carcinoid syndrome (CS) which can be present in metastasized (M1) ileal NET tumours. The exact role of 5-HT metabolism in psychopathology, however, is still unclear.

#### **Study objective**

This study aims to assess impairments in cognition and psychiatric function in ileal NET patients and relate this to 5-HT metabolism, by investigating the relation between psychiatric and cognitive function of ileal M1 NET patients to peripheral 5-HT production.

The study has two main objectives: First, to study the relation between cognitive function and peripheral 5-HT production. Second, to study the relation between the severity of depressive symptoms and peripheral 5-HT production.

Secondary objectives are to assess psychiatric diagnoses within the patient group and relate them to 5-HT production and to assess the severity of irritability and its relation to 5-HT production.

## Study design

observational study

#### Study burden and risks

The risks of this study are negligible. The burden of the study is one site visit to the hospital. 2 extra blood samples will be taken during the blood sample withdrawal as part of the standard care. 24 hour urine sample is extra

and will be done by the patient during the 24 hours prior to hospital visit. During the hospital visit questionnaires, neuropsychological testing and psychiatric evaluation will take place. The estimated time for the evaluation is 2 \* hours.

# Contacts

Public Nederlands Kanker Instituut

Plesmanlaan 121 Amsterdam 1066 CX NL **Scientific** Nederlands Kanker Instituut

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# **Trial sites**

## **Listed location countries**

Netherlands

# **Eligibility criteria**

Age Adults (18-64 years) Elderly (65 years and older)

## **Inclusion criteria**

- Patients with ileal NET with metastatic disease, diagnosed between 2012 and 2017

- Signed informed consent

## **Exclusion criteria**

- No sufficient understanding of the Dutch language.

- A previous cerebro vascular accident (assessed through review of the chart and checked with the patient)

- Severe cognitive problems such as a dementia.

- Delirium in the past 3 months
- Use of 5-HT modulating medication, such as SSRIs or SNRIs, or tryptophan
- Current chemotherapy, or chemotherapy in the past 5 years

- Previous malignancy in the past 5 years, except for adequately treated basal cell carcinoma of the skin.

- Life expectancy shorter than 3 months
- Patients with a primary psychotic disorder (schizophrenia)

# Study design

## Design

Study type: Observational non invasive		
Masking:	Open (masking not used)	
Control:	Uncontrolled	
Primary purpose:	Treatment	

## Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	10-07-2017
Enrollment:	85
Туре:	Actual

# **Ethics review**

Approved WMO	
Date:	17-05-2017
Application type:	First submission
Review commission:	METC NedMec
Approved WMO	

Date:	21-03-2018
Application type:	Amendment
Review commission:	METC NedMec

# **Study registrations**

## Followed up by the following (possibly more current) registration

No registrations found.

# Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register CCMO

ID NL61238.031.17