The use of fecal calprotectin in detecting immunotherapy induced colitis and feasibility for the use of immunohistochemical markers in patients receiving checkpoint inhibitors- a pilot study

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Primary: To determine fecal calprotectin in patients treated with checkpoint inhibitors. Secondary: To describe endoscopic and histologic findings in patients with symptoms that may indicate colitis.To study cytokine production profiles of the...

Ethical review	Approved WMO
Status	Recruiting
Health condition type	Gastrointestinal infections
Study type	Observational invasive

Summary

ID

NL-OMON42995

Source
ToetsingOnline

Brief title
COLIT-1

Condition

- Gastrointestinal infections

Synonym
colitis

Research involving

Human

Sponsors and support

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

Intervention

Keyword: calprotectin, colitis

Outcome measures

Primary outcome

1. Fecal calprotectin levels in patients treated with checkpoint inhibitors and

correlation with symptoms and extent of endoscopic inflammation

2. Type of endoscopic and histological inflammation in patients with colitis

3. Differential expression of colonic cytokines

4. Risk factors for colitis (age and gender of patients, type of malignancy,

type and dose of immunotherapy, history of auto immune disease, baseline fecal

calprotectin)

Secondary outcome

n.a.

Study description

Background summary

Checkpoint inhibitors can effectively induce an anti-tumour immune response. However, they may also cause immune related phenomena like colitis. Clinical presentation alone cannot distinguish colitis from diarrhoea with other causes based on clinical presentation. Also, in some cases patients may not experience symptoms until life threatening ulcerations and perforation occurs. Therefore, stool biomarkers may be useful in patients treated with checkpoint inhibitors. Fecal calprotectin is successfully used as a marker in

inflammatory bowel disease, but has not been validated in immunotherapy induced colitis. The pathogenesis of immunotherapy induced colitis is not clear.
Depletion or function inhibition of mucosal regulatory Foxp3+ T cells may play an important role.

Study objective

Primary: To determine fecal calprotectin in patients treated with checkpoint inhibitors.
Secondary: To describe endoscopic and histologic findings in patients with symptoms that may indicate colitis.
To study cytokine production profiles of the mucosal immune system by immunohistochemistry of colonic biopsies (by means of staining of Foxp3, TGF-B, IL-17, IL-10, TNF-a, IFN -y) to gain more insight into the pathogenesis of immunotherapy induced colitis.
To detect risk factors for developing colitis.

Study design

pilot study

Study burden and risks

Participants are asked to collect feces every two or three weeks (depending on the interval of the administration of the immunotherapy) starting prior to the first cycle of immunotherapy until 2-3 weeks after the last cycle. They will be questioned every 2-3 weeks (either during regular visits or by means of a telephone call) about gastro-intestinal symptoms.
If patients experience gastrointestinal symptoms which may indicate colitis a colonoscopy with at least 10 biopsies will be performed.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

- Age > 18 years
- Starting with anti CTLA-4 antibodies alone or in combination with anti PD-1 antibodies for a malignancy
- Signed informed consent

Exclusion criteria

There are no exclusion criteria for participation in this study

Study design

Design

Study type: Observational invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Diagnostic

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	25-05-2016
Enrollment:	50
Type:	Actual

Ethics review

Approved WMO

Date:	13-05-2016
Application type:	First submission
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

ID: 25248
Source: Nationaal Trial Register
Title:

In other registers

Register	ID
CCMO	NL56864.031.16
OMON	NL-OMON25248