Translational research for immune modulating and targeted therapy in advanced or metastatic non-small cell lung cancer, an exploratory NVALT study

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1. The predictive biomarkers for tumor response to immuno modulating therapy will be a combination of adaptive and innate immune status per patient that will be estimated with a tumor biopsy before, 6 weeks after start treatment (optional) and at...

Ethische beoordeling	Niet van toepassing
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON23268

Bron
Nationaal Trial Register

Verkorte titel
Translational research for immune modulating and targeted therapy in advanced or metastatic NSCLC

Aandoening

Non-small cell lung cancer
Niet-kleincellig longkanker

Ondersteuning

Primaire sponsor: NVALT
Overige ondersteuning: NVALT

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

• Relation between adaptive and innate immune status and tumor response rate, PFS and OS.
• Relation between gate keeper mutations and complex mutations with tumor response rate, PFS and OS on treatments used by treating physician.
• Correlation of the baseline ctDNA level with tumor response rate, PFS and OS
• Correlation of the change in ctDNA level after six weeks of treatment to ORR, PFS and OS.
• Validated tumor educated platelet algorithm that is associated with increased ORR, PFS and OS.
• Validated tumor educated platelet algorithm that is associated with therapy resistance.
• Correlation of STM-panel based response assessment with radiological response assessment as performed by CT-thorax.
• Correlation of PBMC FACS parameters of lymphoid and myeloid subsets in peripheral blood to tumor response rate, PFS and OS.
• Correlation of rare mutation profile, as assessed by NGS on tumor tissue, to tumor response rate, PFS and OS.
• Correlation of tumor tissue IHC parameters to tumor response rate, PFS and OS.
• Correlation of RNAseq on fresh frozen tumor tissue to tumor response rate, PFS and OS.
• Correlation of CT based parameters to tissue parameters and tumor response rate, PFS and OS.
• Correlation of differences between CT based (textural) parameters and tissue parameters and tumor response rate.

Toelichting onderzoek

Achtergrond van het onderzoek

In this study we will explore frozen and paraffin embedded (FFPE) tumor tissue and blood samples from patients that are eligible for immune- and targeted therapy and those who become resistant to immune- and targeted therapy after an initial response. Frozen tumor biopsies will be used for RNA seq and FFPE tissue will be stained with multiple fluorescent targets to identify stimulating and inhibiting immune cells in the tumor. Moreover, blood will be collected to explore the role of circulating blood markers.

Doel van het onderzoek

1. The predictive biomarkers for tumor response to immuno modulating therapy will be a combination of adaptive and innate immune status per patient that will be estimated with a

tumor biopsy before, 6 weeks after start treatment (optional) and at progression or recurrence of disease and blood sampling at baseline, in week 2 or 3, 6, 12 and at progression or recurrence of disease. This status can be defined as the different immune cell fractions estimated by CIBERSORT and the LM22 leukocyte signature matrix estimated from RNA sequencing data. Another approach is looking for activating T8+ cells and inhibitory Treg, macrophages and myeloid suppressor cells by immune fluorescence tests in the same biopsy by multispectral imaging. In combination with clinical data the meaning of the different fractions can be assessed in a prospective way.

2. Resistance to targeted therapy that develop early in the course of disease will be limited to gate keeper mutations and a complex delayed resistance due to a multitude of mechanisms.These resistance mechanisms can be discerned by a biopsy from the growing tumor. DNA and RNA seq data will used to illuminate patterns of resistance.

Onderzoeksopzet

Blood sampling: 1 whole blood and 2 EDTA at baseline, week 2 or 3, week 6, week 12 and at progression or recurrence of disease.

Tumor biopsie will be taken at baseline, week 6 and at progression or recurrence of disease.

Onderzoeksproduct en/of interventie

Blood drops and optionally a tumor biopsy

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Eligible for immunotherapy or targeted treatment.

2. Written informed consent for registry of patient data and extra blood and tumor biopsy.

3. Age 18 years and older.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Without written informed consent patient will be adopted anonymously in the registry and will not take part of the study.

2. Patients with written informed consent for registry of patient data but no consent for extra blood and tumor biopsy will be excluded from the study.

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blindering:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-05-2017
Aantal proefpersonen:	300

Type:	Verwachte startdatum

Ethische beoordeling

Niet van toepassing

Soort:	Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL6218
NTR-old	NTR6390
Ander register	2017/217 : METC

Resultaten