A single arm multicenter biomarker study determining the response to taxane-based chemotherapy in metastatic breast cancer patients with ESR1 mutations in cellfree DNA

Gepubliceerd: 11-06-2018 Laatst bijgewerkt: 15-05-2024

We hypothesize that patients with detectable ESR1 mutations in cell-free DNA benefit from chemotherapy, resulting in improved PFS.

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON25511

Bron
NTR

Verkorte titel
TAX-ESR1 study

Aandoening

breast cancer, metastasis, ESR1 mutations, chemotherapy

Ondersteuning

Primaire sponsor: Erasmus MC Cancer Institute, department of Medical Oncology
Overige ondersteuning: KWF Kankerbestrijding

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

To establish whether patients with ER-positive, HER2- negative MBC with an ESR1 mutation will benefit from taxane based chemotherapy, measured as progression free survival rate at 6 months.

Toelichting onderzoek

Achtergrond van het onderzoek

Endocrine treatment is the mainstay of treatment for ER- positive metastatic breast cancer (MBC). Unfortunately, 40% of patients have no clinical benefit from first-line endocrine therapy due to intrinsic resistance, whereas the remainder of patients initially responding will eventually develop resistance during therapy. Importantly, once the tumor develops resistance to endocrine therapy, the tumor becomes more aggressive, leading to a poor prognosis. Recently, mutations in the gene encoding ERá, ESR1, have attracted particular interest as a mechanism for endocrine resistance in MBC. Since the ESR1 mutated cells grow independently from estrogen, we hypothesize that these tumor cells have higher cell division rates and are therefore more sensitive to the anti-tumor effects from chemotherapy. If this is the case, ESR1 mutated patients would still benefit from chemotherapy, reflected in an improved PFS. Therefore, we present here a biomarker study to investigate whether ESR1 mutated patients could still benefit from taxane-based chemotherapy.

Doel van het onderzoek

We hypothesize that patients with detectable ESR1 mutations in cell-free DNA benefit from chemotherapy, resulting in improved PFS.

Onderzoeksopzet

- Baseline

- 2 weeks

- 6 weeks

- 3 months

- 6 months: determination of response

- Progression

Onderzoeksproduct en/of interventie

Blood draw for cfDNA isolation (20mL) at baseline, during treatment, after treatment and at progression.

Contactpersonen

Publiek

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Female metastatic breast cancer patients with ER-positive, HER2- negative primary tumors;

- Previous treatment with at least an aromatase inhibitor either in adjuvant and/or metastatic setting;

- Considered fit enough to receive taxane-based chemotherapy by the treating physician;

- Intention to start with either paclitaxel or docetaxel as first line treatment for metastatic breast cancer or as second line treatment if the time between completion of first line chemotherapy for metastatic breast cancer and inclusion is more than three years.

- Patient with measurable disease as defined per RECIST1.1 or bone only disease on recent standard work-up for MBC;

- WHO performance status 0-2

- Age > 18 years

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Previous chemotherapy for metastatic disease; completed within three years before inclusion

- Patients with locally advanced disease, primary not amendable for resection or radiation therapy with curative intent;

3- (neo)adjuvant chemotherapy within 6 months prior to treatment start;

- Anti-hormonal treatment for breast cancer within one week prior to treatment start;

- Symptomatic CNS metastasis (the presence of at least one key symptom in combination with radiologic evidence (positive contrast-enhanced CT or MRI of the brain)

- Serious illness or medical unstable condition prohibiting adequate treatment and follow-up.

Onderzoeksopzet

Opzet

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

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	01-12-2017
Aantal proefpersonen:	185
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	11-06-2018
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 46354
Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL7082
NTR-old	NTR7280
CCMO	NL62417.078.17
OMON	NL-OMON46354

Resultaten