A breast cancer 3D model derived from tissue biopsies

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We hypothesize that breast cancer organoids will result in a prospective clinical model that is predictive of treatment response.

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

Samenvatting

ID

NL-OMON21020

Bron
Nationaal Trial Register

Verkorte titel
BCOM-B

Aandoening

Breast Cancer

Ondersteuning

Primaire sponsor: Maastricht University Medical Center +

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

To develop a patient derived clinical model of breast (cancer) organoids using tissue biopsies.

Toelichting onderzoek

Achtergrond van het onderzoek

Background: Breast cancer is the second most common diagnosed malignancy worldwide. Unfortunately, treatment efficacy cannot be guaranteed and is highly influenced by tumor heterogeneity. To combat this, a patient tailored clinical model needs to be developed to guide the patient's treatment regimen.

Herein, the development in the field of (tumor) organoids provides new opportunities. Organoids are patient derived aggregates which grow in 3D and maintain self-renewal pluripotency and lineage specific differentiation. Therefore, in contrast with conventional cell lines, they are thought to maintain patient heterogeneity and characteristics. However, a clear understanding and developed protocol for breast (cancer) organoids test multiple therapy options and guide therapy is lacking.

Hypothesis: We hypothesize that breast cancer organoids will result in a prospective clinical model that is predictive of treatment response.

Opportunity: The establishment and characterization of breast cancer organoids will yield conclusive information on the (epi)-genetic and phenotypic stability of organoids in culture, and the relevance of such organoids as patient avatars.

Impact: Breast cancer organoids may be used to prospectively predict response and guide the selection of more effective treatments improving and prolonging patient survival.

Doel van het onderzoek

We hypothesize that breast cancer organoids will result in a prospective clinical model that is predictive of treatment response.

Onderzoeksopzet

n.a.

Onderzoeksproduct en/of interventie

Patients will undergo standard diagnostics and work-up according to the Dutch National Guidelines, including the marker placement procedure. During the marker placement

procedure an accessory tumor tissue biopsy (14G needle) will be taken by an expert breast radiologist.

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Female,

- >18 years,

- Breast cancer (proven by histopathology),

- Undergoing the marker placement procedure.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Physically or mentally incapable or incompetent to sign informed consent.

Onderzoeksopzet

Opzet

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

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-10-2018
Aantal proefpersonen:	30
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	NL7088
NTR-old	NTR7286
Ander register	ABR number : 65960

Resultaten