

# Monitor Immune Microenvironment and systemic immune effects in pediatric Brain tumors

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**Ethische beoordeling** Positief advies

**Status** Werving gestart

**Type aandoening** -

**Onderzoekstype** Observationeel onderzoek, zonder invasieve metingen

## Samenvatting

### ID

NL-OMON24486

### Bron

NTR

### Verkorte titel

MIMIC Brain

### Aandoening

Pediatric brain tumors

### Ondersteuning

**Primaire sponsor:** Princess Máxima Center for Pediatric Oncology

**Overige ondersteuning:** Stichting Team Westland

### Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

Descriptive characterisation of lymphoid and myeloid subsets and activation status in different compartment, e.g. tumor microenvironment, blood, bone marrow, and CSF at different timepoints

## Toelichting onderzoek

### Achtergrond van het onderzoek

Cellular therapy and immune modifying interventions, e.g. checkpoint inhibition and antibody or CAR T-cell therapy show promising results in adult and pediatric tumors with a previously dismal prognosis. Whereas cellular therapy has been demonstrated to be effective in pediatric acute lymphoblastic leukemia, the efficacy of immunotherapy in neuro oncology needs to be further exploited. A thorough understanding of the tumor microenvironment and its influence on the immune system is the first step in the translation of preclinical immuno-oncology research into clinical trials.

### Doele van het onderzoek

The aim is to characterize the immune infiltrate in the tumor microenvironment and to study the influence of the tumor on immune parameters in different compartments e.g. blood, bone marrow, CSF and faeces. In addition, a broad spectrum of immune parameters will be followed during treatment in different body compartments to describe the influence of therapy (surgery, radiotherapy and chemotherapy). At last, target finding will be incorporated in this project as an exploratory endpoint.

### Onderzoeksopzet

- Screening baseline
- Resection or biopsy = day 0
- Day 14 +/- 7 days
- 3 months +/- 4 weeks
- 6 months +/- 6 weeks
- 12 months +/- 8 weeks = end of monitoring
- Relapse

## Contactpersonen

### Publiek

Princess Máxima Center for Pediatric Oncology  
Raoull Hoogendijk

+31647959515

## **Wetenschappelijk**

Princess Máxima Center for Pediatric Oncology  
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## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

- Age 0 – 18 years at inclusion
- Newly diagnosed brain tumor or relapse of a brain tumor
- MRI representing an image of a high grade brain tumor (high grade glioma, ependymoma, ATRT, medulloblastoma, or otherwise high grade) OR CNS tumor where based on MRI images the judgement of high grade versus low grade can't be made. NB in case MRI imaging prior to biopsy and/or resection is not feasible, the patient can be included based on CT imaging and clinical assessment
- Clinical indication for tumor biopsy/resection
- Written (parental) informed consent

### **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

- Suspected germ cell tumor on radiology or based on tumor markers ( $\alpha$ FP,  $\beta$ HCG)
- Suspected craniopharyngioma on radiology
- Clear characteristics of low grade tumor

## **Onderzoeksopzet**

### **Opzet**

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm

Blinderig: Open / niet geblindeerd

Controle: N.v.t. / onbekend

## Deelname

Nederland

Status: Werving gestart

(Verwachte) startdatum: 01-04-2021

Aantal proefpersonen: 60

Type: Verwachte startdatum

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

## Ethische beoordeling

Positief advies

Datum: 14-10-2020

Soort: Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 52105

Bron: ToetsingOnline

Titel:

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

### Register

NTR-new

CCMO

OMON

### ID

NL8967

NL75515.041.21

NL-OMON52105

# **Resultaten**