

# Myeloid cell reprogramming in thyroid carcinoma

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|                             |                                                     |
|-----------------------------|-----------------------------------------------------|
| <b>Ethische beoordeling</b> | Niet van toepassing                                 |
| <b>Status</b>               | Anders                                              |
| <b>Type aandoening</b>      | -                                                   |
| <b>Onderzoekstype</b>       | Observationeel onderzoek, zonder invasieve metingen |

## Samenvatting

### ID

NL-OMON21311

### Bron

Nationaal Trial Register

### Aandoening

Thyroid carcinoma

### Ondersteuning

**Primaire sponsor:** Radboudumc

**Overige ondersteuning:** KWF

### Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

Transcriptional and epigenetic signature and function of TAMs, BM myeloid progenitors and circulating macrophages before and after treatment.

# Toelichting onderzoek

## Doel van het onderzoek

1. We first propose that in advanced TC, not only tumor-associated macrophages (TAMs), but also circulating monocytes and bone marrow (BM) myeloid progenitors are functionally reprogrammed by tumor-derived metabolites even before their recruitment in the TME.
2. Radioactive iodide (<sup>131</sup>I)(RAI) is a very effective therapy for patients with TC, but is less effective in patients with advanced, metastatic tumors. We hypothesize that by exposing tumor antigens to the immune system, RAI might induce immunogenic effects at the level of the TME with reprogramming of both TAMs present in the TME and circulating monocytes, towards a tumor suppressive phenotype. This may further potentiate the effects of RAI. In addition this could be explored in the future as a basis for immunotherapy for tumors that are refractory to conventional treatment.

## Onderzoeksopzet

- before treatment
- surgery
- 30 days after surgery
- 7days after RAI treatment
- 30days after RAI treatment

## Onderzoeksproduct en/of interventie

Not applicable.

# Contactpersonen

## Publiek

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## Wetenschappelijk

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## Deelname eisen

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

In order to be eligible to participate in this study, a subject must meet all of the following criteria:

In general: Subjects should be at least 18 years old and mentally competent

Patients with TC:

Group 1:

- newly diagnosed patients with TC that are therapy naïve and are planned to receive conventional treatment by surgery followed by RAI
- no evidence of local or distant metastases

Group 2:

- patients with TC with evidence of distant metastases (either newly diagnosed patients who are therapy naïve or patients with persistent or recurrent disease)
- at least 4 months since the previous treatment with RAI (in the patients who have had this treatment in the past)

Controls:

Group 3:

- patients with MNG that are euthyroid and in which the decision has been taken to undergo surgery because of obstructive symptoms or for cosmetic reasons

Group 4:

-patients with MNG that are euthyroid and in which the decision has been taken to undergo RAI because of obstructive symptoms.

Group 5:

-healthy individuals who are euthyroid and have no evidence of thyroid disease.

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

A potential subject who meets any of the following criteria will be excluded from participation in this study:

- Mentally incompetent
- Pregnant or breastfeeding
- Known inflammatory or infectious diseases or an immunosuppressive status;
- Using medication interfering with the immune system
- Reduced platelets counts or other conditions associated with an increased risk of bleeding
- Severe comorbidities: other active malignancy (except for basal cell carcinoma)
- Serious psychiatric pathology
- A self-reported alcohol consumption of >21 units per week

## **Onderzoeksopzet**

### **Opzet**

Type: Observationeel onderzoek, zonder invasieve metingen

Onderzoeksmodel: Anders

**Controle:** N.v.t. / onbekend

## Deelname

|                         |            |
|-------------------------|------------|
| Nederland               |            |
| Status:                 | Anders     |
| (Verwachte) startdatum: | 01-10-2017 |
| Aantal proefpersonen:   | 50         |
| Type:                   | Onbekend   |

## 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        | NL6817                     |
| NTR-old        | NTR7003                    |
| Ander register | NL62671.091.17 : 2017-3628 |

## Resultaten