# The implementation of microarrays in cancer diagnosis (microarray prognostics in breast cancer)

Submission date	Recruitment status No longer recruiting	Prospectively registered		
27/02/2007		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
27/02/2007	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
27/09/2022	Cancer			

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Dr S C Linn

#### Contact details

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# Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

#### Protocol serial number

Nil known

# Study information

#### Scientific Title

The implementation of microarrays in cancer diagnosis (microarray prognostics in breast cancer)

#### Acronym

**RASTER** 

#### **Study objectives**

Recently we have identified a gene expression profile of 70 genes using microarray analysis, which was a more powerful prognostic factor for freedom of distant metastases than current clinicopathological features in node negative breast cancer patients up to 55 years of age. To assess whether this 70-gene microarray test can be implemented in daily clinical practice we aimed to answer the following three questions:

- 1. Is it feasible to collect fresh tumour samples in order to make this test available in pN0 breast cancer patients in community hospitals?
- 2. What is the proportion of a high versus a low risk profile in node negative patients?
- 3. What is the concordance between the 70-gene microarray risk profile and the metastasis risk as assessed with current Dutch guidelines based on clinicopathological factors (such as age, pT, tumour grade, hormonal receptor-status)?

Primary hypothesis: The implementation of microarray diagnostics is feasible in general practice in community hospitals.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approval received from the local ethics committee (Protocol Toetsingscommissie) on the 8th October 2003 (study ref: MO3ARR; letter ref: EV03-464).

# Study design

Non-randomised, non-controlled, diagnostic multicentre clinical trial

# Primary study design

Interventional

# Study type(s)

Diagnostic

# Health condition(s) or problem(s) studied

Breast cancer

#### **Interventions**

Diagnostic intervention with the 70-gene microarray profile giving a result of 'high' or 'low' risk for distant metastasis and death.

#### Intervention Type

Other

#### Phase

**Not Specified** 

#### Primary outcome(s)

The amount of successfully performed diagnostic microarray tests as a proportion of the total number of accrued patients.

## Key secondary outcome(s))

- 1. To assess the proportion of a 'high' versus a 'low' risk profile in lymph node negative breast cancer patients
- 2. To assess the concordance between the 70-gene microarray risk profile and the metastasis risk as assessed with current Dutch guidelines based on clinicopathological factors (such as age, pT, tumor grade, hormonal receptor-status)

#### Completion date

31/12/2006

# **Eligibility**

#### Key inclusion criteria

- 1. Female patients
- 2. With primary operable unifocal breast cancer
- 3. Without clinical signs of lymph node involvement or distant metastasis
- 4. Younger than 55 years of age

## Participant type(s)

Patient

# Healthy volunteers allowed

No

## Age group

Adult

#### Sex

Female

#### Key exclusion criteria

A prior history of any malignancy with the exception of cervical dysplasia and basal cell carcinoma.

#### Date of first enrolment

22/01/2004

#### Date of final enrolment

31/12/2006

# Locations

#### Countries of recruitment

Study participating centre

Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital (NKI AVL)

Amsterdam Netherlands 1066 CX

# Sponsor information

#### Organisation

Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital (NKI AVL) (The Netherlands)

#### **ROR**

https://ror.org/03xqtf034

# Funder(s)

## Funder type

Industry

#### **Funder Name**

Dutch Health Care Insurance Board (CVZ) (The Netherlands) - independent government organisation

#### **Funder Name**

Agendia B.V. (The Netherlands)

# **Results and Publications**

# Individual participant data (IPD) sharing plan

Not provided at time of registration

# IPD sharing plan summary

Not provided at time of registration

# **Study outputs**

Output type Details Date created Date added Peer reviewed? Patient-facing?

Results article	results	01/12/2007		Yes	No
Results article	results	01/09/2011		Yes	No
Results article	10 year follow up	17/09/2022	27/09/2022	Yes	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes