## Trial Description

### Title

**A multicenter, randomized, two-armed, open-label Phase III study to evaluate the vaccination with tumor RNA-loaded autologous dendritic cells versus observation of patients with resected monosomy 3 uveal melanoma**

### Trial Acronym

**DERMA-ER-DC-08**

### URL of the trial

**http://www.ccc.uk-erlangen.de/hautkrebszentrum/klinische-studien/uveamelanom/**

### Brief Summary in Lay Language

**Ocular melanomas are the most common tumors of the eye. With today's modern molecular biological diagnostic methods such as chromosome 3 typing and gene-expression analysis, these tumors can be categorized into aggressive (monosomy 3, class II) and less aggressive forms. This stratification is primarily important for determining the risk of these tumors since currently, there is no therapy available that is able to prevent or delay metastases.**
**A randomized study on patients with a poorer prognosis (monosomy 3) is being carried out, in order to determine whether a cancer vaccine, prepared from autologous (patient's own) dendritic cells and RNA, can prevent or delay progression and further metastases of this extremely aggressive form of cancer. Inclusion into the uveal melanoma study, which hopes to provide a potential therapeutic option for the patient, is only possible if the patient is referred to an institution that is able to manufacture and provide this vaccination, before the patient is operated or treated with radiation. Untreated tumor material is necessary for producing the vaccine on an individualized patient basis.**

### Brief Summary in Scientific Language

**In approximately half of patients diagnosed with uveal melanoma, there remains a risk of life-threatening metastases (in particular in the liver), despite removal or destruction of the original tumor. These high risk patients can now be identified using molecular biological tests. In a new clinical study, the only one of its kind, sponsored by the German Cancer Association, the goal is to evaluate whether a personalized Dendritic Cell (DC) vaccination against the tumor antigens, can stop or at least slow down the occurrence of these metastases. This form of vaccination has already proved to be effective in treating other types of tumors. The Dermatology Clinic at the University of Erlangen has initiated Phase III studies for treating patients diagnosed with monosomy 3-uveal melanoma. Eight university eye clinics in Germany (Erlangen, Essen, Hamburg-Eppendorf, Homburg/Saar, Köln, Lübeck, Tübingen und Würzburg) are participating in this multi-center trial. If uvula melanoma is suspected, it is imperative that the study center be contacted before and therapeutic measures are undertaken, since in order to make the vaccine, the tumor must be handled in a special manner.**

**Genetic alterations are just as important as tumor size for determining the prognosis of uveal melanoma. In approximately a half of the patients with uveal melanoma, the tumor cells exhibit a loss of chromosome 3, also known as Monosomy 3. Monosomy 3 correlates strongly with metastatic spread and therefore, a poor prognosis. Almost all tumors with this genetic change result in a 50% decrease in the 2 year survival of the patient, due to rapid metastasis, in particular to the liver.**

**It is of the essence for patients with uveal melanoma that the spread of the tumor be stopped. Unfortunately, there are currently no medications that can hinder the spread of the disease. It is for this reason that clinical studies, using highly specialized immune-activation against patient specific tumor antigens are being carried out, in an effort to stop or at least slow down, disease progression.**
**In 2013, cancer immunotherapy was celebrated worldwide, as a scientific breakthrough. Over the last 2 years, the knowledge that cancer is under the influence of the immune system has become clearer. The discovery of dendritic cells, their role in the immune system and most importantly, the ability to manipulate these cells for the treatment of cancer has played a major role in current immunotherapy.**

**Dendritic cells are immune-regulating cells that influence the activity of so-called killer cells. Dendritic cells either activate or prevent activation of killer cells. Dendritic cells determine the target of the killer cells, be it a virus or tumor substance. In the case of cancer, it is possible to use irritated (excited) and thus mature dendritic cells to mobilize the patients' immune system to actively attack the tumor cells. This method has been proven effective in thousands of patients in many world-wide clinical trials, which have used dendritic cell therapy to treat skin melanoma, kidney cell carcinoma, and prostate cancer as well as brain cancer. In very few cases, the vaccination has led to tumor regression, in many cases vaccination has led to a clear slowing of and in some cases a halt in disease progression. In particular in early stages of cancer diagnosis, when no metastases have been formed, immunotherapy has been successful as a targeted immune-response against tumor antigens and can prevent metastases.**

**The Dermatology Clinic at the University of Erlangen as well as 7 other clinics is participating in phase III trials for the treatment of large, newly diagnosed uveal melanoma tumors. In order to give patients the opportunity to activate their immune system to prevent metastases of their tumor, a personal tumor specific, customized vaccination will manufactured in the sterile labs at the Dermatology Clinic –Experimental Immunotherapy. Manufacture of the vaccination requires surgical removal of the tumor and preparation of an autologous dendritic cell vaccination loaded with patient specific tumor RNA.**

## Organizational Data

- DRKS-ID: **DRKS00009784**
- Date of Registration in DRKS: **2016/01/12**
- Date of Registration in Partner Registry or other Primary Registry: **2013/12/22**

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- Investigator Sponsored/Initiated Trial (IST/IIT): **yes**
- Ethics Approval/Approval of the Ethics Committee: **Approved**
- (leading) Ethics Committee Nr.: **12 2011 , Ethik-Kommission der Friedrich-Alexander-Universität Erlangen-Nürnberg**

## Secondary IDs

- EudraCT-No.
(for studies acc. to Drug Law): **2007-007847-28**
- Primary Registry-ID: **NCT01983748 (ClinicalTrials.gov)**

## Health condition or Problem studied

- Free text: **uveal melanoma**
- ICD10: **C69.3 - Malignant neoplasm: Choroid**

## Interventions/Observational Groups

- Arm 1: **Vaccination with autologous Dendritic Cells loaded with autologous tumor-RNA**
- Arm 2: **Standard of care; in uveal melanoma patients the Standard is to perform clinical stagings every 3 months; exactly this procedure was Chosen for the control arm of this study**

## Characteristics

- Study Type: **Interventional**
- Study Type Non-Interventional: **[---]***
- Allocation: **Randomized controlled trial**
- Blinding: **[---]***
- Who is blinded: **[---]***
- Control: **Other**
- Purpose: **Treatment**
- Assignment: **Parallel**
-

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Purpose: **Treatment**

Assignment: **Parallel**

Phase: **III**

- Off-label use (Zulassungsüberschreitende Anwendung eines Arzneimittels): **N/A**

### Primary Outcome

**Prolongation of Disease Free Survival**

### Secondary Outcome

**Prolongation of Overall Survival**

## Countries of recruitment

- DE **Germany**

## Locations of Recruitment

- University Medical Center **Hautklinik, Experimentelle Immuntherapie, Erlangen**
- University Medical Center **Essen**
- University Medical Center **Hamburg/Eppendorf**
- University Medical Center **Homburg/Saar**
- University Medical Center **Köln**
- University Medical Center **Lübeck**
- University Medical Center **Tübingen**
- University Medical Center **Würzburg**

## Recruitment

- Planned/Actual: **Actual**
- (Anticipated or Actual) Date of First Enrollment: **2014/07/10**
- Target Sample Size: **200**
- Monocenter/Multicenter trial: **Multicenter trial**
- National/International: **National**

### Inclusion Criteria

- Gender: **Both, male and female**
- Minimum Age: **18 Years**
- Maximum Age: **75 Years**

### Additional Inclusion Criteria

**Monosomy 3**

### Exclusion criteria

**Metastases**

## Addresses

- **Primary Sponsor**

  **Universitätsklinikum Erlangen**
  **Maximiliansplatz 2**
  **91054 Erlangen**
  **Germany**

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  Fax: **[---]***
  E-mail: **[---]***
  URL: **www.uk-erlangen.de**

- **Contact for Scientific Queries**

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## Sources of Monetary or Material Support

- **Public funding institutions financed by tax money/Government funding body (German Research Foundation (DFG), Federal Ministry of Education and Research (BMBF), etc.)**

**Deutsche Krebshilfe**
**53113 Bonn**
**Germany**

Telephone: **[---]***
Fax: **[---]***
E-mail: **[---]***
URL: **[---]***

## Status

- Recruitment Status: **Recruiting ongoing**
- Study Closing (LPLV): **[---]***

## Trial Publications, Results and other documents

- Paper **Artikel in der Ophtalmologe**

** This entry means the parameter is not applicable or has not been set.*

**** This entry means that data is not displayed due to insufficient data privacy clearing.*