Phase I, Open-Label Study With Dendritic Cell therapy (MesoPher) In Combination With Ex-tended-Pleurectomy/Decortication After Chemotherapy in Subjects With Resectable Mesothelioma.

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Ethical review	Approved WMO
Status	Recruiting
Health condition type	Mesotheliomas
Study type	Interventional

Summary

ID

NL-OMON52279

Source
ToetsingOnline

Brief title
Ensure Trial

Condition

- Mesotheliomas

Synonym
asbestos cancer, malignant pleural mesothelioma

Research involving

Human

Sponsors and support

Primary sponsor: Erasmus MC, Universitair Medisch Centrum Rotterdam
Source(s) of monetary or material Support: Erasmus universitair medisch centrum

Intervention

Keyword: Allogenic tumour cell lysate, Dendritic cell immunotherapy, Mesothelioma, Pleurectomy/Decortication

Outcome measures

Primary outcome

To determine the feasibility of DCT performed before and after eP/D in patients

with early stage epithelioid MPM who received first line chemotherapy.

Secondary outcome

To assess the safety of DCT performed before and after eP/D in patients with

early stage epithelioid MPM.

To evaluate the efficacy (as measured by progression free and overall survival)

of combining DCT and eP/D after chemotherapy in patients with early stage

epithelioid MPM.

To determine the anti-tumor immune response induced by (neo)adjuvant DCT.

Study description

Background summary

Malignant pleural mesothelioma (MPM) is an uncommon but aggressive neoplasm with low survival rates. So far, standard-of-care treatment for MPM is antifolate/platinum-based chemotherapy. For patients with early stage MPM the role of radical surgery remains controversial and multimodal treatment might improve patients* prognosis. Dendritic cell therapy (DCT), Mesopher, proved to be safe and yielded promising results in patients with MPM. On one hand, DCT

showed ability to reduce tumor load in some patients; on the other hand, it demonstrated a better outcome when injected earlier in tumor development in preclinical models, thus representing the rationale for a combined (neo)adjuvant approach with extended pleurectomy/decortication (eP/D) surgery.

Study objective

This study has been transitioned to CTIS with ID 2024-514054-70-00 check the CTIS register for the current data.

To assess whether (neo)-adjuvant DCT in combination with eP/D is feasible in early stage epithelioid MPM patients after first-line chemotherapy.

Study design

This is an open label, single center, phase 1 study.

Intervention

Before standard-of-care chemotherapy, a leukapheresis will be performed and monocytes will be collected for the production of DCT. Allogeneic tumor lysate (Pheralys) loaded autologous DCs (MesoPher) will be re-injected 4 weeks (+/- 1 week) after completing chemotherapy, 2 times every other week. Four weeks after the first injection with DCT, patients will undergo eP/D surgery and receive three bi-weekly injections with DCT (starting 4 weeks after surgery).

Study burden and risks

Patients have to undergo extra outpatient visits and blood tests for this trial. The last one is an invasive procedure, but risks are limited. A non-mandatory biopsy will be collected before starting neo-adjuvant DCT. This will be either a computerized tomography (CT)-guided needle biopsy or a Video-Assisted Thoracoscopic Surgery (VATS) surgical biopsy. Some possible complications may include, but are not limited to pneumothorax, bleeding in the lung and infection. An intravenous entrance is necessary for the leukapheresis, for blood samples and for the injection of MesoPher. Leukapheresis is a standard procedure and will be performed according to standard procedures. There is a limited risk for transient thrombocytopenia and leukopenia. DCT with Mesopher (autologous DCs loaded with Pheralys) already proved to be safe in patients with MPM. Possible side effects are described within the protocol.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)

Inclusion criteria

• Patients with a histologically confirmed diagnosis of epithelioid MPM who are eligible for 2 to 4 cycles of platinum-based chemotherapy.
• Patients must be at least 18 years old and must be able to give written informed consent.
• ECOG performance status 0-1.
• Written informed consent according to ICH-GCP.
•Fit to receive platinum-based chemotherapy (as per standard of care of the treating
physician/Institution) and undergo a P/D with optional removal of hemidiaphragm and
pericardium. The responsible surgeon and chest physician should judge the required
fitness prior to registration, taking into account the results of all the relevant (i.e. pulmonary,
cardiac) examinations.
• Tumor tissue available after completing chemotherapy and before starting treatment with DCT. Tumor tissue can be obtained by either a CT-guided needle

biopsy or a VATS surgical biopsy.

Exclusion criteria

• Clinical or radiological invasion of mediastinal structures (heart, aorta, spine, esophagus,
etc.) and widespread chest wall invasion (stage T4). Involvement of supraclavicular
or coeliac nodes. Stage IV (metastatic disease).
• Subject with any concurrent medical, psychological or psychiatric disease or condition
that is likely to compromise the ability to give informed consent or to interfere
with study procedures or results, or that in the opinion of the investigator would constitute
a hazard for participating in this study.
• Subject with any previous malignancy except adequately treated basal cell or squamous
cell skin cancer, superficial or in-situ cancer of the bladder or other cancer for
which the subject has been disease-free for at least 3 years.
• Subject with any known active serious infection, including human immunodeficiency
virus (HIV), hepatitis B or C virus, or syphilis infection.
• Subject with a history of autoimmune disease, except for diabetes mellitus type I or
other conditions, where patient can be eligible following discussion with medical
monitor.
• Subject who has received an organ allograft.
• Serious intercurrent chronic or acute illness such as pulmonary (COPD or asthma)
or cardiac (NYHA class III or IV) or hepatic disease or other illness considered by
the study coordinator to constitute an unwarranted high risk for eP/D or investigational
DCT.
•Unavailability of tumor tissue after completing chemotherapy and before starting treatment with DCT.

Study design

Design

Study type: Interventional

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	16-12-2021
Enrollment:	16
Type:	Actual

Medical products/devices used

Product type:	Medicine
Generic name:	Somatic cells autologous

Ethics review

Approved WMO Date:	01-06-2021
Application type:	First submission
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	03-08-2021
Application type:	First submission
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	23-12-2022
Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	30-01-2023

Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
EU-CTR	CTIS2024-514054-70-00
EudraCT	EUCTR2021-000496-37-NL
CCMO	NL76712.000.21