Autologous Dendritic Cells Loaded with Allogenic Tumor Lysate for Surgically Resected Pancreatic Cancer Patients (REACtiVe Trial)

Published: 07-06-2017
Last updated: 12-04-2024

The first part of the study will focus on the feasibility of dendritic cell immunotherapy for pancereatic cancer patients.If this treatment is deemed feasible we will investigate immune-response, immune profile, clinical activity and safety and...

Ethical review	Not approved
Status	Will not start
Health condition type	Exocrine pancreas conditions
Study type	Interventional

Summary

ID

NL-OMON45421

Source
ToetsingOnline

Brief title
Rotterdam pancrEAtic Cancer Vaccination Trial (REACtiVe Trial)

Condition

- Exocrine pancreas conditions
- Gastrointestinal neoplasms malignant and unspecified

Synonym
pancreatic cancer, pancreatic ductal adenocarcinoma

Research involving
Human

Sponsors and support

Primary sponsor: Stichting Leveronderzoek
Source(s) of monetary or material Support: Ministerie van OC&W,Amphera b.v.,Amphera en TKI-LSH ondersteuning

Intervention

Keyword: Dendritic cell, Immunotherapy, Pancreatic cancer

Outcome measures

Primary outcome

To determine the feasibility of the treatment procedure and determine the establishment of an immune response against mesothelin (TAA*s) in resected pancreatic cancer patients receiving MesoPher with or without concurrent low-dose gemcitabine.

Secondary outcome

To determine the systemic immune profile, with emphasis on T lymphocytes, in surgically resected pancreatic cancer patients; and investigate how these immune profiles are affected by MesoPher with or without concurrent low-dose gemcitabine for individual patients.

Study the safety, clinical response and survival of MesoPher with or without the addition of low-dose chemotherapy in surgically resected pancreatic cancer patients.

Study description

Background summary

Pancreatic cancer is estimated to become the second leading cause of cancer related mortality by 2020 and the current prognosis of newly diagnosed pancreatic cancer patient is very poor with a 5-year survival of <5%. We are in need of new treatment modalities to curb the progression of pancreatic cancer. Current treatment of pancreatic cancer shows slightly improvement of prognosis. The introduction of immunotherapy could elicit specific anti-cancer response without damaging surrounding healthy tissue and therefor would be a great addition to our current regime. Although preclinical and clinical results of dendritic cells pulsed with specific tumor antigens and autologous tumor lysate are very promising, no clinical data is available concerning the efficacy and safety of allogenic tumor lysate pulsed dendritic cell vaccination in pancreatic cancer patients.

Study objective

The first part of the study will focus on the feasibility of dendritic cell immunotherapy for pancereatic cancer patients.

If this treatment is deemed feasible we will investigate immune-response, immune profile, clinical activity and safety and toxicity of the allogeneic tumor cell lysate (PheraLys) loaded onto autologous dendritic cells (MesoPher) with or without a low dose of gemcitabine in resected pancreatic cancer patients.

Study design

Single center prospective open label Phase I/II study consistuing of 2 parts:

Part 1: feasibility study
Part 2: determine the safety and efficacy of dendritic cell immunotherapy in combination with a low dose gemcitabine

Intervention

Leukapheresis is performed of which the monocytes are used for differentiation to dendritic cells using specific cytokines. Pulsed autologous dendritic cells (MesoPher) are re-injected 3 times every two weeks. After the third injection with MesoPher, revaccinations to boost the immune system are given after 3 and 6 months.

In the second part of the study MesoPher will be given as described above with the addition of low-dose gemcitabine.

Study burden and risks

Patients have to undergo extra outdoor visits for this study and extra invasive

procedures especially for this trial, like a catheter in a blood vessel. These are invasive procedure but risks are limited. This intravenous entrance is necessary every time, for the leukapheresis, for blood samples and for the injection of the dendritic cells. A leukapheresis is a standard procedure and will be performed according to guidelines. There is a limited risk for transient thrombocytopenia and leukopenia. Adverse events due to administration of autologous cells, that have been loaded with allogeneic human materials, is possible but we expect these risks to be limited. Because not the lysate itself is administered to the patients but only when it is processed by the dendritic cells of the patient.

Contacts

Public
Stichting Leveronderzoek

's Gravendijkwal 230
Rotterdam 3015 CE
NL
Scientific
Stichting Leveronderzoek

's Gravendijkwal 230
Rotterdam 3015 CE
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

* Surgically resected pancreatic cancer
* Completed post-operative standard treatment
* No disease activity assessed by radiological imaging
* Patients must be at least 18 years old and must be able to give written informed consent.
* Patients must be ambulatory (WHO-ECOG performance status 0,1, or 2)
* Patients must have normal organ function and adequate bone marrow reserve: absolute neutrophil count > 1.0 x 109/l, platelet count > 100 x 109/l, and Hb > 6.0 mmol/l. (as determined during screening)
* Positive DTH skin test (induration > 2mm after 48 hrs) against at least one positive control antigen tetanus toxoid.
* Ability to return to the hospital for adequate follow-up as required by this protocol.
* Written informed consent according to ICH-GCP

Exclusion criteria

* Medical or psychological impediment to probable compliance with the protocol.
* Previous or current treatment with immunotherapeutic agents..
* Current use of steroids (or other immunosuppressive agents). Patients must have had 6 weeks of discontinuation and must stop of any such treatment during the time of the study. Prophylactic usage of dexamethasone during chemotherapy is excluded from that 6 weeks interval
* Prior 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 patient has been disease-free for five years.
* Serious concomitant disease, or active infections.
* History of autoimmune disease or organ allografts, or with active acute or chronic infection, including HIV and viral hepatitis.
* Serious intercurrent chronic or acute illness such as pulmonary (asthma or COPD) 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 investigational DC treatment.
* Known allergy to shell fish (may contain KLH).
* Pregnant or lactating women.
* Inadequate peripheral vein access to perform leukapheresis
* Concomitant participation in another clinical trial
* An organic brain syndrome or other significant psychiatric abnormality which would comprise the ability to give informed consent, and preclude participation in the full protocol and follow-up.
* Absence of assurance of compliance with the protocol. Lack of availability for follow-up assessment.

Study design

Design

Study phase:	2
Study type:	Interventional
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Will not start
Enrollment:	26
Type:	Anticipated

Medical products/devices used

Product type:	Medicine
Generic name:	Somatic cells autologous

Ethics review

Approved WMO

Date:	07-06-2017
Application type:	First submission
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)

Not approved

Date:	20-06-2017
Application type:	First submission
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
EudraCT	EUCTR2017-001135-40-NL
CCMO	NL61305.000.17