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VXM01 phase I dose escalation study in patients with locally advanced, inoperable and stage IV pancreatic cancer

Submission date 05/12/2011	**Recruitment status** No longer recruiting	[_] Prospectively registered [X] Protocol
Registration date 12/01/2012	**Overall study status** Completed	[_] Statistical analysis plan [X] Results
Last Edited 21/01/2019	**Condition category** Cancer	[_] Individual participant data

Plain English summary of protocol

Background and study aims
The aim of the study is to test the safety and tolerability of VXM01, a novel anti-angiogenic cancer vaccine which targets the blood vessels of solid tumors. Signs of immunological and clinical response will also be monitored. This study is the first human clinical trial with VXM01. A mouse-analog vaccine has shown promising activity and a good safety profile in test animals. VXM01 is administered in ascending doses following a step-wise approach.

Who can participate?
Locally advanced, inoperable and metastatic pancreatic cancer patients of aged 18 or over.

What does the study involve?
All patients receive standard-of-care chemotherapy and are randomly allocated to receive either VXM01 or placebo (dummy).

What are the possible benefits and risks of participating?
Not provided.

Where is the study run from?
University Hospital in Heidelberg, Germany.

When is study starting and how long is it expected to run for?
The study starts in December 2011, and patients will be followed up for a maximum period of 24 months.

Who is funding the study?
VAXIMM GmbH, Mannheim, Germany.

Who is the main contact?
Dr Thomas Schmidt

Contact information

Type(s)
Scientific

Contact name
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Additional identifiers

ClinicalTrials.gov (NCT)
NCT01486329

Protocol serial number
VXM01-01-DE

Study information

Scientific Title
VXM01 phase I dose escalation study in patients with locally advanced, inoperable and stage IV pancreatic cancer to examine safety, tolerability, and immune response to the investigational VEGFR-2 DNA vaccine VXM01: First-in-human, monocenter, double-blind, placebo-controlled, phase I dose escalation study

Acronym
VXM01-01-DE

Study objectives
The aim of the study is to test the safety and tolerability of VXM01, a novel anti-angiogenic cancer vaccine which targets the blood vessels of solid tumors. Signs of immunological and clinical response will also be monitored. This study is the first human clinical trial with VXM01. A mouse-analog vaccine has shown promising activity and a good safety profile in test animals. This study is conducted in a single center at the University Hospital in Heidelberg, Germany.

On 05/02/2014 the following changes were made to the trial record:
1. The anticipated end date was changed from 31/03/2013 to 01/12/2014
2. The target number of participants was changed from 37 to 72

Ethics approval required
Old ethics approval format

Ethics approval(s)
Ethics committee of the Medical faculty of Heidelberg, 15/11/2011, ref: AFmu-283/2011

Primary study design
Interventional

Study design
Monocenter double-blind placebo-controlled phase I dose escalation study

Study type(s)
Screening

Health condition(s) or problem(s) studied
Locally advanced, inoperable and stage IV pancreatic cancer

Interventions
1. VXM01, live anti-angiogenic cancer vaccine, escalating doses
2. Placebo drink solution

Intervention Type
Other

Phase
Phase I

Primary outcome(s)
Safety and tolerability: number of dose-limiting toxicities and maximum tolerated dose at day 38

Key secondary outcome(s)
1. Immune response: number of positive patients
2. Clinical response: tumor staging according to Response Evaluation Criteria In Solid Tumors (RECIST) criteria
3. Tumor perfusion: tumor perfusion determined by dynamic contrast enhanced-magnetic resonance imaging (DCE-MRI)
Measured upto 24 months

Completion date
01/12/2014

Eligibility

Key inclusion criteria
1. Written informed consent, signed and dated
2. Locally advanced, inoperable and stage IV pancreatic cancer patients according to Union for International Cancer Control (UICC) based on diagnostic imaging using computer-tomography (CT) or histological examinations
3. Male or post-menopausal female
4. Age more than or equal to 18 years
5. Chemotherapy naive within 60 days before screening visit except gemcitabine treatment
6. Karnovsky index >70

7. Life expectancy > 3 months
8. Adequate renal, hepatic, and bone marrow function
9. Absolute neutrophil count >1500/µL
10. Hemoglobin >10 g/dL
11. Platelets >75000/µL
12. Prothrombin time and international normalized ratio (INR) <1.5 times upper limit of normal (ULN) (except under anticoagulant treatment)
13. Aspartate aminotransferase <4 times ULN
14. Alanine aminotransferase <4 times ULN
15. Total bilirubin <3 times ULN
16. Creatinine clearance estimated according to Cockcroft-Gault >30 mL/min
17. Proteinuria <1 g protein on 24 h urine collection

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Sex
All

Key exclusion criteria
1. State after pancreas resection (complete or partial)
2. Resectable disease
3. Drug trial participation within 60 days before screening visit
4. Other previous or current malignancy except basal or squamous cell skin cancer, in situ cervical cancer, or any other cancer from which the patient has been disease-free for <2 years
5. Prior vaccination with Ty21a
6. Cardiovascular disease defined as:
6.1. Uncontrolled hypertension (systolic blood pressure >160 mmHg or diastolic blood pressure >100 mmHg)
6.2. Arterial thromboembolic event within 6 months before randomization including:
6.2.1. Myocardial infarction
6.2.2. Unstable angina pectoris
6.2.3. Cerebrovascular accident
6.2.4 Transient ischemic attack
7. Congestive heart failure New York Heart Association grade III to IV
8. Serious ventricular arrhythmia requiring medication
9. Clinically significant peripheral artery disease > grade 2b according to Fontaine
10. Hemoptysis within 6 months before randomization
11. Esophageal varices
12. Upper or lower gastrointestinal bleeding within 6 months before randomization
13. Significant traumatic injury within 4 weeks before randomization
14. Non-healing wound, bone fracture or any history of gastrointestinal ulcers within three years

before inclusion, or positive gastroscopy within 3 months before inclusion
15. Gastrointestinal fistula
16. Thrombolysis therapy within 4 weeks before randomization
17. Bowel obstruction within the last 30 days before screening visit
18. Liver cirrhosis ≥ grade B according to Child-Pugh Score-Classification
19. Presence of any acute or chronic systemic infection
20. Radiotherapy within 4 weeks before randomization
21. Major surgical procedures, or open biopsy within 4 weeks before randomization
22. Fine needle aspiration within 7 days before randomization
23. Chronic concurrent therapy within 2 weeks before and during the double-blind study period with:
23.1. Corticosteroids (except steroids for adrenal failure) or immunosuppressive agents
23.2. Antibiotics
23.3. Bevacizumab
23.4. Any epidermal growth factor receptor inhibitor
23.5. Chemotherapy except gemcitabine before day 10
24. Multi-drug resistant gram-negative germ
25. Pregnancy
26. Lactation
27. Inability to comply with study and/or follow-up procedures
28. History of other disease, metabolic dysfunction, physical examination finding, or clinical laboratory finding giving reasonable suspicion of a disease or condition that contraindicates the use of an investigational drug or that might affect the interpretation of the study results or render the patient at high risk for treatment complications
29. Women of childbearing potential
30. Any history of drug hypersensitivity
31. Any condition which results in an undue risk for the patient during the study participation according to the investigator

Date of first enrolment
06/12/2011

Date of final enrolment
01/12/2014

Locations

Countries of recruitment
Germany

Study participating centre
Clinic of General Surgery
Heidelberg
Germany
69120

Sponsor information

Organisation
VAXIMM GmbH (Germany)

ROR
https://ror.org/03x5tah73

Funder(s)

Funder type
Industry

Funder Name
VAXIMM GmbH (Germany)

Results and Publications

Individual participant data (IPD) sharing plan

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	16/03/2015	21/01/2019	Yes	No
Results article	results	16/01/2018	21/01/2019	Yes	No
Protocol article	protocol	20/08/2012		Yes	No