AVAstin and Temozolomide Attacking Relapsed glioma

Submission date	Recruitment status No longer recruiting	Prospectively registered		
16/07/2007		☐ Protocol		
Registration date 16/07/2007	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	[] Individual participant data		
10/06/2021	Cancer			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof D.J. Richel

Contact details

Academic Medical Centre (AMC)
Department of Oncology
P.O. Box 22660
Amsterdam
Netherlands
1100 DD
+31 (0)20 566 9111
D.J.Richel@amc.uva.nl

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

15598

Study information

Scientific Title

Bevacizumab in combination with metronomic dose temozolomide in patients with relapsed high grade gliomas

Acronym

AVATAR

Study objectives

The change of chemotherapeutic temozolomide schedule from conventional to metronomic treatment may overcome temozolomide resistance in patients with recurrent glioma without any major toxicity. Administration of angiogenesis inhibitor bevacizumab leads to normalisation of glioma tumour blood vessels, during a period of at least 28 days. During this normalisation window, administration of a

combination therapy is thought to be most effective. Therefore we combine bevacizumab with metronomic dose temozolomide treatment. The PFS6 (Progression Free Survival at 6 months) is about 9% in this patient group under the old treatment regimen. We expect a PFS6 of about 30% with the combination of bevacizumab and temozolomide. Therapy regimen will continue after six months.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Local medical ethics committee (Medisch Ethische Commissie Academisch Medisch Centrum Amsterdam) gave approval on the 28th March 2007 (ref: MEC 07/052 # 07.17.0453).

Study design

Non-randomised, controlled, parallel group trial

Primary study design

Interventional

Secondary study design

Non randomised controlled trial

Study setting(s)

Not specified

Study type(s)

Not Specified

Participant information sheet

Health condition(s) or problem(s) studied

Relapsed glioma

Interventions

The effects of the combination of Bevacizumab (10 mg every three weeks, intravenously [iv]) with daily Temozolomide (50 mg/m^2, orally) will be compared with historical data of a matched patient group. The MRI effects of (co-) administration of dexamethasone (daily 3 dd 4 mg, orally) will be examined during the first 20 days of the experiment.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Bevacizumab, temozolomide

Primary outcome measure

Main study parameters/endpoints:

The Progression Free Survival at 6 months (PFS6) is the main study parameter. This is about 9% in this patient group under the old treatment regimen. We expect a PFS6 of about 30% with the combination of bevacizumab and temozolomide. Therapy regimen will continue after six months.

Secondary outcome measures

- 1. Safety
- 2. Overall survival
- 3. Response rate
- 4. Changes in tumour blood flow and vascular permeability (vascular permeability [Ktrans] and relative Cerebral Blood Volume [rCBV] values) during the first 20 days of treatment with bevacizumab in comparison with dexamethasone and the combination bevacizumab and dexamethasone
- 5. Levels of Circulating Endothelial Cells (CECs)
- 6. Circulating Progenitor Cells (CPCs)
- 7. Vascular Endothelial Growth Factor (VEGF)
- 8. Placental Growth Factor (PlGF) in peripheral blood will be determined at different time points

Overall study start date

13/02/2007

Completion date

01/02/2009

Eligibility

Key inclusion criteria

- 1. Patients present with histologically confirmed diagnosis of intracranial recurrent high grade glial tumour (World Health Organisation [WHO] grade IV). Patients may be entered based on local pathology from the original tumour specimen
- 2. Patients must have evidence of tumour progression following radiation and chemotherapy as measured by Magnetic Resonance Imaging (MRI) (MRI-0 at presentation)
- 3. Patients may have received up to two prior chemotherapy regimens (with concurrent radiotherapy)

- 4. Patients may have undergone prior surgical resection and will be eligible if recovered from the effects of surgery
- 5. Patients must have adequate organ function, including the following:
- 5.1. Adequate bone marrow reserve: Absolute Neutrophil Count (ANC) greater than 1.5 x $10^9/L$, platelet count greater than $100 \times 10^9/L$, and haemoglobin greater than g/dL (6.21 mmol/L)
- 5.2. Hepatic: total bilirubin less than two times the Upper Limit of Normal (ULN); Alkaline Phosphatase (ALP), Aspartate Transaminase (AST), and Alanine Transaminase (ALT) less than 3 x ULN
- 5.3. Renal: serum creatinine less than 1.5 ULN

These tests must be performed less than five days prior to enrolment. Eligibility for haemoglobin count may be reached by transfusion

- 6. Patients must have a Karnofsky Performance Score greater than 70%
- 7. Patients must be greater than 18 years of age, with a life expectancy of greater than eight weeks
- 8. Patient compliance and geographic proximity that allow for adequate follow up is required
- 9. Male and female patients with reproductive potential must use an approved contraceptive method, if appropriate (for example, Intrauterine Device [IUD], birth control pills, or barrier device) during and for three months after discontinuation of study treatment. Women with childbearing potential must have a negative serum pregnancy test less than three days prior to study enrolment
- 10. Signed informed consent from the patient or legal representative is required

Participant type(s)

Patient

Age group

Not Specified

Sex

Both

Target number of participants

30

Total final enrolment

23

Key exclusion criteria

- 1. Patients with inability to comply with protocol or study procedures (for example, an inability to swallow tablets)
- 2. Patients who have received treatment within the last 30 days with a drug that has not received regulatory approval for any indication at the time of study entry
- 3. Patients receiving EIAEDs (Enzyme-Inducing Anti-Epileptic Drugs). Patients must discontinue EIAEDs greater than 14 days prior to study enrolment. The investigator may prescribe non-EIAEDs
- 4. Patients receiving any other anticancer therapy, any anticoagulant therapy
- 5. Patients with serious concomitant systemic disorders (for example, active infection or abnormal electrocardiogram indicative of cardiac disease) that, in opinion of the investigator, would compromise the safety of the patient and his/her ability to complete the study
- 6. Patients with prior thrombo-embolic events

Date of first enrolment

13/02/2007

Date of final enrolment

01/02/2009

Locations

Countries of recruitment

Netherlands

Study participating centre Academic Medical Centre (AMC)

Amsterdam Netherlands 1100 DD

Sponsor information

Organisation

Academic Medical Centre (AMC) (The Netherlands)

Sponsor details

Department of Internal Medicine P.O. Box 22660 Amsterdam Netherlands 1100 DD

Sponsor type

Hospital/treatment centre

Website

http://www.amc.uva.nl

ROR

https://ror.org/03t4gr691

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Academisch Medisch Centrum

Alternative Name(s)

Academic Medical Center, AMC

Funding Body Type

Private sector organisation

Funding Body Subtype

Universities (academic only)

Location

Netherlands

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

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		01/08/2010	10/06/2021	Yes	No