Trial of aciclovir in the prophylaxis of herpes infections in critical care

Submission date Recruitment status [X] Prospectively registered 13/02/2006 No longer recruiting [] Protocol [] Statistical analysis plan Registration date Overall study status 14/03/2006 Completed [X] Results [] Individual participant data **Last Edited** Condition category 19/05/2022 Infections and Infestations

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Alexander Binning

Contact details

Intensive Therapy Unit Western Infirmary Glasgow United Kingdom G11 5JR

Additional identifiers

EudraCT/CTIS number 2006-000612-24

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers WN06AN002

Study information

Scientific Title

Trial of aciclovir in the prophylaxis of herpes infections in critical care

Acronym

TRAPHICC

Study objectives

The overall aim of this proof of concept study is to serve as a pilot study for a multicentre study powered to detect improvement in Intensive Care Unit (ICU) mortality by giving aciclovir prophylaxis to prevent Herpes Simplex Virus (HSV) infection in the lungs.

As of 01/06/2009 this record has been updated to include an extension to the anticipated end date; the initial end date at the time of registration was 31/05/2008.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Multi-Centre Research Ethics Committee for Scotland (Committee A) approved on the 28/03 /2008 (ref: 06/MRE00/14; Protocol Number: 3; EudraCT Number: 2006-000612-24).

Study design

Double-blind, randomised, parallel group placebo-controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Prevention

Participant information sheet

Health condition(s) or problem(s) studied

Herpes simplex virus infection of the lower respiratory tract in critically ill patients

Interventions

Administration of 15 mg/kg per day aciclovir or placebo by infusion three times daily over 1 hour

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Aciclovir

Primary outcome measure

The primary endpoint is the mean change in Karnofsky index from baseline to day 28 + /- 2 days and 90 + /- 2 days after entry to the study

Secondary outcome measures

- 1. Proportion of patients with HSV detected during ICU stay in lower respiratory secretions; proportion of patients with HSV detected during ICU stay in blood samples
- 2. In patients in whom HSV is detected during ICU stay, proportions of infections due to primary infection and reactivation of latent infection
- 3. At each sampling time point, the correlation between HSV lymphocyte response and viral titres
- 4. Mean plasma soluble cytokine levels in patients with and without HSV infection; mean respiratory secretion soluble cytokine levels in patients with and without HSV infection
- 5. Proportions of patients with HSV reactivation according to type of cytokine response
- 6. Mean complement activation before HSV is detected, after HSV detection and in patients where HSV is not detected during ICU stay
- 7. Proportion of patients in whom each of Cytomegalovirus (CMV), Epstein-Barr Virus (EBV), Human Herpes Virus Six (HHV6) and Human Herpes Virus Seven (HHV7) infections are detected during ICU stay
- 8. Median number of days on ventilation, median ICU stay, frequency of prescription of each of anti-retroviral agents, corticosteroids, immunosuppressive agents
- 9. Proportion of patients surviving at 90 days following ICU admission
- 10. Number of days of survival following ICU admission
- 11. The survival time for patients surviving beyond 90 days will be censored at 90 days
- 12. Proportion of HSV infections which are HSV1, proportion of HSV infections which are HSV2
- 13. Mean vital signs, white cell count and creatinine clearance during ICU stay
- 14. Reporting of adverse events occurring during randomised treatment or during the 7 days following the end of randomised treatment

Overall study start date

01/06/2006

Completion date

30/09/2009

Eligibility

Key inclusion criteria

- 1. All patients 18 years or over entering ICU
- 2. Patient expected to stay in the ICU longer than 36 hours and intubated with an endotracheal or tracheostomy tube within 24 hours of admission to ICU
- 3. Patient not requiring treatment with aciclovir, valaciclovir, ganciclovir, foscarnet, probenicid or other drug known to have anti-herpes simplex activity
- 4. Patient must have no known allergy to aciclovir
- 5. Females of childbearing age must have negative pregnancy test on admission
- 6. Written informed consent from the patient or assent obtained from relatives

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

500

Key exclusion criteria

- 1. Duration of admission confidently expected to be less than 36 hours
- 2. Patients with endotracheal or tracheostomy tube placed more than 24 hours before admission to ICU
- 3. Patient has clinical features of HSV disease
- 4. Patient previously randomised to this study
- 5. Patients deemed to be suitable for entry to another trial
- 6. Previous hypersensitivity to aciclovir or valaciclovir
- 7. Patient requiring agent with anti-herpes virus activity
- 8. Patient previously enrolled in another trial of an investigational drug within the past 30 days
- 9. Patient is pregnant or lactating

Date of first enrolment

01/06/2006

Date of final enrolment

30/09/2009

Locations

Countries of recruitment

Scotland

United Kingdom

Study participating centre Intensive Therapy Unit

Glasgow United Kingdom G11 5JR

Sponsor information

Organisation

Greater Glasgow Health Board (North Glasgow University Hospitals Division) (UK)

Sponsor details

Room 9
Administration Building
Western Infirmary
Glasgow
Scotland
United Kingdom
G11 6NT
+44 (0)141 211 1817
judith.godden@northglasgow.scot.nhs.uk

Sponsor type

Hospital/treatment centre

ROR

https://ror.org/05kdz4d87

Funder(s)

Funder type

Government

Funder Name

Chief Scientist Office of the Scottish Executive Health Department (UK) (ref: CZB/4/375)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

Not provided at time of registration

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Basic results		04/02/2021	19/05/2022	No	No