Ventilation with lower tidal volumes as compared to traditional tidal volumes of patients not suffering from acute lung injury

Submission date	Recruitment status No longer recruiting	Prospectively registered		
20/12/2005		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
20/12/2005	Completed	[X] Results		
Last Edited 07/01/2021	Condition category Respiratory	[] Individual participant data		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

Protocol serial number N/A

Study information

Scientific Title

Ventilation with lower tidal volumes as compared to traditional tidal volumes of patients not suffering from acute lung injury

Acronym

HiLoNali

Study objectives

We hypothesise that lung protective mechanical ventilation, using lower tidal volumes, attenuates mechanical ventilation induced pulmonary inflammation.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics approval received from the local medical ethics committee

Study design

Randomised, active controlled, parallel group trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Mechanical ventilation, complications

Interventions

Patients are randomly assigned to receive mechanical ventilation involving either traditional Tidal Volumes (VT) (10 ml/kg Predicted Body Weight [PBW]) or lower VT (6 ml/kg PBW). All patients will undergo a minilavage every second day, preceded by blood sampling.

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

- 1. Local inflammatory responses
- 2. Local Fibrin turnover
- 3. Systemic levels of biomarkers of lung injury

Key secondary outcome(s))

Late ALI/ARDS.

Completion date

01/01/2007

Eligibility

Key inclusion criteria

Patients who are intubated and expected to receive mechanical ventilation for greater than 72 hours are eligible for the study if they do not suffer from Acute Lung Injury (ALI)/Acute Respiratory Distress Syndrom (ARDS), according to the American/European consensus criteria.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Total final enrolment

150

Key exclusion criteria

- 1. Greater than 36 hours after start of Mechnical Ventilation (MV)
- 2. Under 18
- 3. Participation in other trials
- 4. Pregnancy
- 5. Increased uncontrollable intracranial pressure
- 6. Severe chronic respiratory disease (daily medication)
- 7. Pneumonia
- 8. Use of corticosteroids (systemic or local) or other immunosuppressive agents
- 9. Pulmonary thrombo-embolism
- 10. After pneumonectomy or lobectomy
- 11. Previous randomisation in this study

Date of first enrolment

01/01/2005

Date of final enrolment

01/01/2007

Locations

Countries of recruitment

Netherlands

Study participating centre

Department of Intensive Care

Amsterdam Netherlands 1105 AZ

Sponsor information

Organisation

Academic Medical Centre (AMC) (Netherlands)

ROR

https://ror.org/03t4gr691

Funder(s)

Funder type

Not defined

Funder Name

Not provided at time of registration

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	01/07/2010	07/01/2021	Yes	No