

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

Submission date 20/12/2005	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 20/12/2005	Overall study status Completed	☐ Statistical analysis plan ☒ 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

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Additional identifiers

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

Primary study design

Interventional

Study design

Randomised, active controlled, parallel group trial

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 Mechanical 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