



**ESICM**  
LIVES FORUM  
**UTRECHT**  
**22-24 JUNE**

For physicians, nurses, and other  
allied healthcare professionals



*The Intensive Connection*

**nvic**

nederlandse  
vereniging voor  
intensive care



## ACKNOWLEDGMENTS

ESICM & NVIC would like to wholeheartedly thank the following LIVES Forum Utrecht Sponsor:



ESICM & NVIC would like to wholeheartedly thank the following companies who support the three workshops:



GE HealthCare



MedicalSimulator

INNOVACIÓN EN EDUCACIÓN

 Thursday 22 June

Thu 22 Jun  
10:00 - 10:45

## Welcome & registration workshops guests

Break

Thu 22 Jun  
10:45 - 14:15

## Haemodynamic Monitoring (upon pre-registration)

Case-Based Workshop

Moderator : X. Monnet (Le Kremlin-Bicêtre, France)      Director : X. Monnet (Le Kremlin-Bicêtre, France)

### *Objectives:*

- Interpret TTE/TEE findings
- Understand the role of TTE/TEE in haemodynamic monitoring
- Describe haemodynamic monitoring with central venous pressure, the pulmonary artery catheter, transpulmonary thermodilution, bioreactance and volume clamp methods
- Remind the means for assessing tissue oxygenation and to discuss their drawbacks and advantages
- Discuss the practical use of different haemodynamic variables during clinical cases

10:45 **Echo is all what I need!**

A. Mekontso Dessap (Créteil, France)

11:05 **Transpulmonary thermodilution or the pulmonary artery catheter?**

X. Monnet (Le Kremlin-Bicêtre, France)

11:25 **Q&A**

11:35 **Clinical assessment**

G. Hernandez (Santiago, Chile)

11:45 **Microcirculation**

V. Edul (La Plata, Argentina)

12:05 **Q&A**

12:15 **LUNCH BREAK**

**12:45 Clinical case: septic shock and ARDS**  
V. Edul (La Plata, Argentina), G. Hernandez (Santiago, Chile), M. Pinsky (Pittsburgh, United States of America), A. Mekontso Dessap (Créteil, France), S. Magder (Montreal, Canada)

**Thu 22 Jun**  
**10:45 - 14:15**      **ECMO (upon pre-registration)**  
Workshop

Instructors : M.V. Antonini (Cesena, Italy), J. Riera del Brio (Barcelona, Spain), A. Engstrom (Amsterdam, Netherlands), J. Hermens (Utrecht, Netherlands), D. De Backer (Braine-l'Alleud, Belgium), D. Donker (Utrecht, Netherlands)

Directors : M.V. Antonini (Cesena, Italy), J. Riera del Brio (Barcelona, Spain)

*Objectives:*

V-V ECMO support management:

1. Indicate V-V ECMO in ARDS
2. Indicate the adequate V-V cannulation strategy: double lumen vs single lumen
3. Adjust blood and gas flow
4. Identify and manage recirculation
5. Identify and manage drainage insufficiency
6. Wean the patient

V-A ECMO support management:

1. Indicate V-A ECMO and ECPR in cardiogenic shock/cardiac arrest
2. Indicate the adequate V-A cannulation strategy
3. Adjust blood and gas flow
4. Titrate drugs during support
5. Indicate left ventricle unloading
6. Identify and solve differential hypoxia
7. Wean the patient

**10:45 Welcome and introduction**

**10:55 Simulation on V-V ECMO and V-A ECMO**

**12:25 LUNCH BREAK**

**12:55 Simulation on V-V ECMO and V-A ECMO**

**Thu 22 Jun**  
**10:45 - 14:15**      **ARDS from controlled ventilation to liberation (upon pre-registration)**  
Workshop

Instructors : K. Vaporidi (Heraklion, Greece), L. Rose (London, United Kingdom), A. Jonkman (Rotterdam, Netherlands), M. Schultz (Amsterdam, Netherlands)

Directors : L. Piquilloud (Lausanne, Switzerland), G. Grasselli (Milan, Italy)

*Objectives:*

- Assess ventilated patients with ARDS
- Set and optimise ventilation and optimise ventilation
- Interpret the meaning of chest wall and lung mechanics
- Recognise mechanical variables associated with outcome
- Safely manage the transition from conventional to assisted ventilation
- Assess recruitability and PEEP setting
- Personalise ventilation based on mechanics and Radiology
- Assess drive and effort in assisted ventilation
- Titrate sedation and support based on respiratory effort

**10:45      Welcome and introduction**

**10:50      Clinical case debate part I**

**12:15      LUNCH BREAK**

**12:45      Clinical case debate part II**

**14:10      Wrap up**

**Thu 22 Jun**  
14:00 - 14:45

**Welcome & registration conference guests**

Break

**Thu 22 Jun**  
14:45 - 14:50

**Welcome & opening**

Thematic Session

**Speakers :** I. Van der Horst (Maastricht, Netherlands), M. Cecconi (Milan, Italy), J. De Waele (Gent, Belgium)

**Thu 22 Jun**  
14:50 - 16:10

**Cardio-respiratory function: pathophysiological basis**

Thematic Session

**Moderators :** V. Edul (La Plata, Argentina), G. Hernandez (Santiago, Chile)

**14:50      Mechanisms of hypoxaemia and hypercapnia: role of haemodynamics in shunt and deadspace**  
**M. Antonelli (Rome, Italy)**

- 15:10 **Hypoxaemia in COVID-19: " is this ARDS that I see before me?"**  
G. Grasselli (Milan, Italy)

- 15:30 **VILI: a vascular injury?**  
N. Juffermans (Amsterdam, Netherlands)

- 15:50 **Venous return during mechanical ventilation**  
S. Magder (Montreal, Canada)

**Thu 22 Jun**  
**16:10 - 16:28** **e-Poster Session 1**  
Abstracts

Moderator : M. Schultz (Amsterdam, Netherlands)

- 16:10 **Fluid bronchogram, Does it really mean what we think it means? A case series of thirteen patients in which lung ultrasound showed a blood flow patterns on the known 'fluid bronchogram sign'**  
M. Abdulhaleem Hamada (Winchester, United Kingdom)

Theme  
Acute respiratory failure and mechanical ventilation

- 16:16 **Clinical readiness of virtual patient models for individualised mechanical ventilation: a systematic literature review**  
R.S.P. Warnaar (Enschede, Netherlands)

Theme  
Acute respiratory failure and mechanical ventilation

- 16:22 **Effect of High Protein Normo-caloric Nutrition on Skeletal Muscle Wasting in Critically ill Mechanical Ventilated Patients: A Randomized Double-Blind Study**  
R.R. Bikash (New Delhi, India)

Theme  
Acute respiratory failure and mechanical ventilation

**Thu 22 Jun**  
16:10 - 16:40

## Coffee break

Break

**Thu 22 Jun**  
16:40 - 17:20

## Fluid restriction in septic shock: good or bad option?

Debate

Moderators : L. Derde (Utrecht, Netherlands), I. Van der Horst (Maastricht, Netherlands)

### 16:40 Fluid restriction in septic shock: good or bad option?

M. Ostermann (London, United Kingdom), X. Monnet (Le Kremlin-Bicêtre, France), M. Cecconi (Milan, Italy)

**Thu 22 Jun**  
17:20 - 18:00

## Lung protective ventilation strategies and targets

Debate

Moderators : A. Vieillard-Baron (Boulogne-Billancourt, France), L. Piquilloud (Lausanne, Switzerland)

### 17:20 Lung protective ventilation strategies and targets

N. Juffermans (Amsterdam, Netherlands), M. Schultz (Amsterdam, Netherlands), M. Antonelli (Rome, Italy)

 Friday 23 June

Fri 23 Jun  
08:30 - 09:00

## Welcome & registration conference guests

Break

Fri 23 Jun  
09:00 - 10:40

## Managing hypoxaemic respiratory failure

Thematic Session

Moderators : M. Ostermann (London, United Kingdom), A. Girbes (Amsterdam, Netherlands)

- 09:00 **Respiratory effort during non-invasive support: pulmonary and cardiovascular effects**  
G. Grasselli (Milan, Italy)

- 09:20 **Patient-ventilator synchronisation and cardiac dysfunction**  
K. Vaporidi (Heraklion, Greece)

- 09:40 **Does automation improve lung protection?**  
M. Schultz (Amsterdam, Netherlands)

- 10:00 **Setting the ventilatory support to reduce the haemodynamic impact in ARDS**  
A. Vieillard-Baron (Boulogne-Billancourt, France)

- 10:20 **Heart and lung interactions: don't forget the abdomen!**  
J. De Waele (Gent, Belgium)

Fri 23 Jun  
10:40 - 11:04

## e-Poster Session 2

Abstracts

Moderator : S. Magder (Montreal, Canada)

- 10:40 **The effect of continuous magnesium administration on QTc interval in critically ill patients: a retrospective observational cohort study**  
C. van Ginkel (Amsterdam, Netherlands)

Theme

Cardiovascular issues in ICU

- 10:46 **Long-term physical and mental health outcomes of critically ill covid-19 patients: A national cohort study from Malta**  
N. Grech (Msida, Malta)

Theme

Acute respiratory failure and mechanical ventilation

- 10:52 **Neuropsychiatric sequelae do not depend on ECMO support nor on levels of consciousness during ECMO support**  
L. Pladet (Utrecht, Netherlands)

Theme

Cardiovascular issues in ICU

- 10:58 **Ultrasound-based exploration of vasculature response to cuff-based perturbation**  
A. Barbagini (Eindhoven, Netherlands)

Theme

Cardiovascular issues in ICU

**Fri 23 Jun**  
10:40 - 11:10 **Coffee break**  
Break

**Fri 23 Jun**  
11:10 - 12:30 **Extracorporeal support in respiratory and cardiac failure: the challenge**  
Thematic Session

Moderators : J. Kesecioglu (Utrecht, Netherlands), M. Ostermann (London, United Kingdom)

- 11:10 **ECMO in ARDS: gas exchange and haemodynamic effects**  
A. Combes (Paris, France)

- 11:30 **Extracorporeal support in moderate and severe ARDS**  
J. Riera del Brio (Barcelona, Spain)

- 11:50 **Regional oxygenation during VA-ECMO**  
A. Combes (Paris, France)

- 12:10 **Extracorporeal CPR for cardiac arrest**  
M. Van De Poll (Maastricht, Netherlands)

Fri 23 Jun  
12:30 - 13:50

**Lunch break**

Break

Fri 23 Jun  
13:50 - 15:30

**Cardio-respiratory crosstalk in specific conditions**

Thematic Session

Moderators : A. Jonkman (Rotterdam, Netherlands), A. Mekontso Dessap (Créteil, France)

- 13:50 **Cardiovascular complications resulting from weaning: what is the evidence?**  
L. Rose (London, United Kingdom)

- 14:10 **Management of patients with pulmonary hypertension**  
M. Pinsky (Pittsburgh, United States of America)

- 14:30 **Pulmonary and systemic haemodynamics in acute asthma**  
S. Magder (Montreal, Canada)

- 14:50 **Oesophageal pressure or vascular pressure to assess inspiratory effort?**  
L. Piquilloud (Lausanne, Switzerland)

- 15:10 **Mechanical support for high risk pulmonary embolism**  
D. Donker (Utrecht, Netherlands)

Fri 23 Jun  
15:30 - 16:50

**Fluids and vasopressors**

Thematic Session

Moderators : K. Vaporidi (Heraklion, Greece), M. Schultz (Amsterdam, Netherlands)

- 15:30 **The consequences of fluid accumulation in ARDS**  
M. Ostermann (London, United Kingdom)

- 15:50 **How to reduce the fluid balance in ARDS?**  
D. De Backer (Braine-l'Alleud, Belgium)
- 16:10 **Early norepinephrine administration to reduce the fluid balance in septic shock**  
J.L. Teboul (Le Kremlin-Bicêtre, France)
- 16:30 **Fluid therapy and the microcirculation**  
V. Edul (La Plata, Argentina)

**Fri 23 Jun**  
**16:50 - 17:08** **e-Poster Session Best Abstracts**  
Abstracts

Moderator : J. De Waele (Gent, Belgium)

- 16:50 **A computational platform for virtual patient trials of fluid responsiveness prediction in septic shock phenotypes**  
M.P. Mulder (Enschede, Netherlands)

Theme

Cardiovascular issues in ICU

- 16:56 **Diagnostic accuracy of ROX HR index- in predicting HFNC outcome in adult patients with hypoxic respiratory failure – prospective observational study**  
R. Shameem (Thiruvananthapuram, India)

Theme

Acute respiratory failure and mechanical ventilation

- 17:02 **Cardiac dysfunction after brain death supported with VA-ECMO as a bridge to myocardial recovery. Can we increase effective heart donation?**  
Á. Barranco de Santiago (Barcelona, Spain)

Theme

Cardiovascular issues in ICU

**Fri 23 Jun**  
**16:50 - 17:20** **Coffee break**  
Break

Fri 23 Jun  
17:20 - 18:00

## Revisiting "optimal PEEP": heart and lung at a crossroad

Debate

Moderators : A. Vieillard-Baron (Boulogne-Billancourt, France), M. Schultz (Amsterdam, Netherlands)

17:20

## Revisiting "optimal PEEP": heart and lung at a crossroad

A. Jonkman (Rotterdam, Netherlands), G. Grasselli (Milan, Italy), A. Mekontso Dessap (Créteil, France)

Fri 23 Jun  
18:00 - 18:40

## What is the optimal haemodynamic monitoring for ARDS patients?

Debate

Moderators : V. Edul (La Plata, Argentina), I. Van der Horst (Maastricht, Netherlands)

18:00

## What is the optimal haemodynamic monitoring for ARDS patients?

G. Hernandez (Santiago, Chile), A. Vieillard-Baron (Boulogne-Billancourt, France), X. Monnet (Le Kremlin-Bicêtre, France)

Fri 23 Jun  
18:40 - 18:45

## Break

Break

Fri 23 Jun  
18:45 - 19:30

## Forty-three dimensions of Intensive Care Medicine: evolution & enterprise

Keynote Lecture

18:45

## Forty-three dimensions of Intensive Care Medicine: evolution & enterprise

J. Kesecioglu (Utrecht, Netherlands)

Fri 23 Jun  
19:30 - 21:30

## Cocktail party

Networking

## Saturday 24 June

Sat 24 Jun  
08:30 - 09:00

### Welcome & registration conference guests

Break

Sat 24 Jun  
09:00 - 10:20

### Advanced cardio-respiratory monitoring

Thematic Session

Moderators : L. Derde (Utrecht, Netherlands), P. de Feiter (Rotterdam, Netherlands)

- 09:00 **Heart-lung interactions: the pathophysiological basis**  
M. Pinsky (Pittsburgh, United States of America)

- 09:20 **Monitoring of heart-lung interactions: how I use echocardiography**  
A. Mekontso Dessap (Créteil, France)

- 09:40 **Monitoring of heart-lung interactions: how I use advanced haemodynamic monitoring**  
D. De Backer (Braine-l'Alleud, Belgium)

- 10:00 **How ventilation helps assessing fluid responsiveness**  
X. Monnet (Le Kremlin-Bicêtre, France)

Sat 24 Jun  
10:20 - 10:50

### Coffee break

Break

Sat 24 Jun  
10:50 - 11:30

### Recruitment manoeuvre in ARDS: what are the costs?

Debate

Moderators : A. Jonkman (Rotterdam, Netherlands), M. Schultz (Amsterdam, Netherlands)

- 10:50 **Recruitment manoeuvre in ARDS: what are the costs?**  
K. Vaporidi (Heraklion, Greece), D. Donker (Utrecht, Netherlands), J. Kesecioglu (Utrecht, Netherlands)

**Sat 24 Jun**  
11:30 - 12:10

## Should we use balanced solution for all patients?

Debate

Moderators : N. Juffermans (Amsterdam, Netherlands), L. Derde (Utrecht, Netherlands)

**11:30 Should we use balanced solution for all patients?**

V. Edul (La Plata, Argentina), A. Girbes (Amsterdam, Netherlands), G. Hernandez (Santiago, Chile)

**Sat 24 Jun**  
12:10 - 12:15

## Closing

Thematic Session

Speakers : I. Van der Horst (Maastricht, Netherlands), J. De Waele (Gent, Belgium)