FINAL PROGRAMME

Respiratory Failure and Mechanical Ventilation Conference

13-15 February 2020
Berlin, Germany
I am delighted to welcome you to the first ever ERS Respiratory Failure and Mechanical Ventilation Conference. This exciting event has been developed around a combination of cutting-edge scientific sessions and interactive educational content, and as conference chair it is a true pleasure to be able to offer this to our members and healthcare professionals.

The conference programme has been developed around three main tracks - adult acute respiratory failure, chronic respiratory failure and paediatric respiratory failure. We have listened to feedback from participants of other ERS courses and our organising committee have designed topic areas with the delegates' needs at the forefront of their thinking. This was no easy task to ensure that the requirements of pulmonologists, paediatricians, intensivists and other professionals working in critical care were catered for. However, we are confident that the programme will provide something for everyone.

I would also like to encourage delegates to utilise choice during your time at the conference. You are welcome to follow a particular track throughout, however the flexibility of the conference means that you are free to attend any session from the programme if this better matches your interests.

You will find a focus on interactive sessions, and this will include the ability to participate in hands-on practical skills sessions and presentations of original research and case reports. Additionally, the conference will provide you with access to the experts in the field.

Furthermore, the conference will also provide invaluable networking opportunities within the community. Personally, I find the chance for knowledge exchange and ideas sharing with colleagues and peers to be a key element in contributing to professional development. Throughout the conference programme you will have the chance to personally meet the experts in the field.

I would like to thank those of you who have submitted cases and abstracts for presentation or discussion at the event. Your contributions are vital in making the content of the conference relevant and beneficial for participants.

Our host city is a diverse and vibrant European capital and is a fitting venue for what promises to be a stimulating and successful event. I look forward to welcoming you to Berlin.

Leo Heunks
Conference chair
### OVERVIEW PROGRAMME

**THURSDAY, 13.02.2020**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td><strong>08:00-10:00</strong></td>
<td><strong>OPENING SESSION</strong>&lt;br&gt;Understanding respiratory physiology</td>
</tr>
<tr>
<td><strong>10:00-10:30</strong></td>
<td><strong>Break</strong></td>
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<tr>
<td><strong>10:30-12:00</strong></td>
<td><strong>SYMPOSIUM</strong>&lt;br&gt;Pediatric mechanical ventilation recommendations&lt;br&gt;&lt;br&gt;<strong>SYMPOSIUM</strong>&lt;br&gt;Getting the basic right&lt;br&gt;&lt;br&gt;<strong>SYMPOSIUM</strong>&lt;br&gt;Non-invasive ventilation (NIV) in neuromuscular disorders</td>
</tr>
<tr>
<td><strong>12:00-12:50</strong></td>
<td><strong>Lunch Break</strong></td>
</tr>
<tr>
<td><strong>12:50-14:00</strong></td>
<td><strong>CASE BASED</strong>&lt;br&gt;Monitoring of mechanical ventilation in children&lt;br&gt;&lt;br&gt;<strong>CASE BASED</strong>&lt;br&gt;Monitoring the ventilated patient&lt;br&gt;&lt;br&gt;<strong>CASE BASED</strong>&lt;br&gt;Noninvasive ventilation - practical aspects</td>
</tr>
<tr>
<td><strong>14:10-15:10</strong></td>
<td><strong>ORAL POSTER DISCUSSION</strong>&lt;br&gt;Invasive mechanical ventilation&lt;br&gt;&lt;br&gt;<strong>BREAS</strong>&lt;br&gt;Ventilator integrated polygraphy: The latest monitoring solutions for NIV&lt;br&gt;&lt;br&gt;<strong>ORAL POSTER DISCUSSION</strong>&lt;br&gt;Chronic noninvasive ventilation&lt;br&gt;&lt;br&gt;<strong>ORAL POSTER DISCUSSION</strong>&lt;br&gt;High flow nasal therapy and respiratory muscles</td>
</tr>
<tr>
<td><strong>14:00-15:15</strong></td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td><strong>15:15-17:15</strong></td>
<td><strong>PRO/CON Debate</strong>&lt;br&gt;Controversies in patients with acute respiratory failure</td>
</tr>
<tr>
<td><strong>10:15-12:35</strong></td>
<td><strong>SKILLS WORKSHOP</strong>&lt;br&gt;Respiratory monitoring&lt;br&gt;&lt;br&gt;<strong>SKILLS WORKSHOP</strong>&lt;br&gt;Respiratory monitoring</td>
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*Additional registration required*
### OVERVIEW PROGRAMME

**FRIDAY, 14.02.2020**

**Rooms**

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<thead>
<tr>
<th>Alexander I</th>
<th>Alexander II</th>
<th>Alexander III</th>
<th>Friedrich Wilhelm</th>
<th>Grenander I</th>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 08:00-09:30   | SYMPOSIUM
- Specific ventilation strategies in children
- Mechanical ventilation in specific cases
- Non-invasive ventilation (NIV) in COPD |
| 09:30-10:00   | Break                                      |
| 10:00-12:00   | SYMPOSIUM
- Adverse effects of mechanical ventilation |
| 12:00-13:00   | Lunch Break                                |
| 14:10-15:10   | ORAL POSTER DISCUSSION
- Acute noninvasive ventilation
- FISCHER & PAYKEL HEALTHCARE
- High flow therapy: A paradigm shift from oxygen therapy to respiratory support
- ORAL POSTER DISCUSSION
- Chronic obstructive pulmonary disease
- ORAL POSTER DISCUSSION
- Paediatrics and Quality of life |
| 14:15-15:15   | Break                                      |
| 15:15-17:15   | SYMPOSIUM
- Noninvasive ventilation and high flow therapy (HFNT)
- Prolonged weaning
- PHILIPS
- Advances in NIV therapy |
| 17:30-19:00   |                                           |

*additional registration required*
# OVERVIEW PROGRAMME

**SATURDAY, 15.02.2020**

**Rooms**

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<table>
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<tr>
<th>Time</th>
<th>Session</th>
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</table>
| 08:00-09:30| **SYMPOSIUM**  
Noninvasive ventilation outside the ICU  
**LIVE** |
| 09:30-10:00| **SYMPOSIUM**  
Rescue therapies for respiratory failure  
**LIVE** |
| 10:00-11:15| **SYMPOSIUM**  
Health-related quality (HRQL) of life in patients with long-term ventilation  
**LIVE** |
| 11:30-12:30| **CASE BASED**  
Noninvasive ventilation and noninvasive CPAP in the PICU  
**LIVE** |
|             | **MEET THE EXPERT**  
Understanding the ventilator waveform  
**LIVE** |
|             | **MEET THE EXPERT**  
Measurements of nocturnal gas exchange  
**LIVE** |
| 12:30-13:30| Lunch Break                                                          |
| 13:30-15:30| **CASE BASED**  
Weaning from mechanical ventilation  
**LIVE** |
|             | **CASE BASED**  
Problem-solving - Case studies of NIV problems  
**LIVE** |
|             | **SKILLS WORKSHOPS**  
Core competency in mechanical ventilation  
**LIVE** |
| 15:15-15:45| **CLOSING SESSION**  
YEAR IN PREVIEW  
Paediatric- Acute - Chronic  
**LIVE** |

*additional registration required*
PROGRAMME

This information was up-to-date on 28 November 2019
**08:00 - 10:00**

**Symposium: Opening session: Understanding respiratory physiology**

**Aims:** To provide an introduction of respiratory physiology.

**Disease(s):** Adult acute respiratory failure, Chronic respiratory failure, Paediatric respiratory failure

**Target audience:** Anaesthesiologist, Clinician, Emergency medicine doctor, Fellow, Intensivist/critical care physician, Junior member, Paediatrician, Physiologist, Pulmonologist, Resident, Respiratory physician, Respiratory therapist, Scientist, Student

**Chairs:** Lise Piquilloud (Lausanne, Switzerland), Anita Simonds (London, United Kingdom)

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Location</th>
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<tbody>
<tr>
<td>08:00</td>
<td>Welcome and introductory word by the Conference Chair</td>
<td>Leo Heunks (Amsterdam, Netherlands)</td>
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<tr>
<td>08:10</td>
<td>Development of the respiratory system: from cradle to grave</td>
<td>Stefano Nava (Bologna (BO), Italy)</td>
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<tr>
<td>08:40</td>
<td>Impaired gas exchange</td>
<td>Leo Heunks (Amsterdam, Netherlands)</td>
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<tr>
<td>09:10</td>
<td>Basics of respiratory mechanics</td>
<td>Martin J. Tobin (Hines, United States of America)</td>
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<tr>
<td>09:40</td>
<td>History of mechanical ventilation</td>
<td>Martin Kneyber (Groningen, Netherlands)</td>
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**10:30 - 12:00**

**Symposium: Paediatric mechanical ventilation recommendations**

**Aims:** To receive an update on the most recent recommendations and data on mechanical ventilation in children and preterms and paediatric acute respiratory distress syndrome (ARDS).

**Disease(s):** Paediatric respiratory failure

**Target audience:** Emergency medicine doctor, Intensivist/critical care physician, Neonatologist, Paediatrician, Pulmonologist, Researcher, Respiratory physician, Respiratory therapist, Sleep specialist/technologist

**Chairs:** Linda Corel (Rotterdam, Netherlands), Christopher Milesi (Montpellier, France)

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<tr>
<td>10:30</td>
<td>Recommendations for mechanical ventilation in children</td>
<td>Martin Kneyber (Groningen, Netherlands)</td>
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<tr>
<td>11:00</td>
<td>Recommendations for mechanical ventilation in preterms</td>
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<tr>
<td>11:30</td>
<td>Ventilation strategies in paediatric ARDS: are they different in children as compared to adults?</td>
<td>Guillaume Emeriaud (Montreal, Canada)</td>
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**10:30 - 12:00**

**Symposium: Getting the basic right**

**Different modes of ventilation**

**Aims:** To learn the different modes of ventilation.

**Disease(s):** Adult acute respiratory failure

**Target audience:** Anaesthesiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Respiratory physician, Trainee

**Chairs:** Lieuwe Bos (Amsterdam, Netherlands), Lara Pisani (Bologna (BO), Italy)

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<tr>
<td>10:30</td>
<td>Controlled ventilator modes</td>
<td>Paolo Navalesi (Padova, Italy)</td>
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<tr>
<td>11:00</td>
<td>Partially supported modes</td>
<td>Lise Piquilloud (Lausanne, Switzerland)</td>
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<tr>
<td>11:30</td>
<td>NIV modes: different from IMV</td>
<td>Elise Morawiec (Paris, France)</td>
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</table>
**10:30 - 12:00**

### Symposium: Noninvasive ventilation (NIV) in neuromuscular disorders

**Aims:** To elucidate developments in mechanical ventilation in patients with neuromuscular disorders.

**Disease(s):** Chronic respiratory failure, Paediatric respiratory failure

**Target audience:** Anaesthesiologist, Clinician, Intensivist/critical care physician, Junior member, Nurse, Paediatrician, Patient, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist

**Chairs:** Wolfram Windisch (Cologne, Germany), Pons Odena Marti (Barcelona, Spain)

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<tr>
<th>Time</th>
<th>Title</th>
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<tbody>
<tr>
<td>10:30</td>
<td>Role of neuromuscular diseases in pulmonary medicine</td>
<td>Wolfram Windisch (Cologne, Germany)</td>
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<tr>
<td>11:00</td>
<td>NIV in rapidly progressive diseases: when to start?</td>
<td>Anita Simonds (London, United Kingdom)</td>
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<td>11:30</td>
<td>Cough assisting</td>
<td>Peter J. Wijkstra (Groningen, Netherlands)</td>
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### 15:15 - 17:15

### Pro and con debate: Controversies in patients with acute respiratory failure

**Aims:** To tackle three different controversial issue in the treatment of acute de novo respiratory failure, like the utility and effectiveness of steroid therapy, the rationale for performing lung biopsy in ARDS and finally the potential danger and utility of NIV to treat de novo respiratory failure.

**Disease(s):** Adult acute respiratory failure

**Target audience:** Anaesthesiologist, Intensivist/critical care physician, Junior member, Pulmonologist, Respiratory therapist

**Chairs:** Lise Piquilloud (Lausanne, Switzerland)

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<th>Time</th>
<th>Title</th>
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<tbody>
<tr>
<td>15:15</td>
<td>PRO - Lung biopsy in ARDS</td>
<td>Lieuwe Bos (Amsterdam, Netherlands)</td>
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<tr>
<td>15:25</td>
<td>CON - Lung biopsy in ARDS</td>
<td>Christian Karagiannidis (Cologne, Germany)</td>
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<tr>
<td>15:35</td>
<td>Discussion</td>
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<tr>
<td>15:55</td>
<td>PRO - NIV in acute hypoxemic failure</td>
<td>Paolo Navalesi (Padova, Italy)</td>
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<tr>
<td>16:05</td>
<td>CON - NIV in acute hypoxemic failure</td>
<td>Alexandre Demoule (Paris, France)</td>
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<tr>
<td>16:15</td>
<td>Discussion</td>
<td></td>
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<tr>
<td>16:35</td>
<td>PRO - Steroids in ARDS</td>
<td>Stefano Nava (Bologna (BO), Italy)</td>
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<tr>
<td>16:45</td>
<td>CON - Steroids in ARDS</td>
<td>Pieter Roel Tuinman (Amsterdam, Netherlands)</td>
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<tr>
<td>16:55</td>
<td>Discussion</td>
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### Skills workshop: Respiratory monitoring

**Aims:** To learn to visualize the diaphragm and the lung using ultrasound and how it can help in diagnosis of respiratory failure; to know the practical aspects of esophageal balloon insertion can how esophageal balloon can help in medical decision making; to learn the interpretation of signals derived from esophageal balloon.

**Disease(s):** Adult acute respiratory failure

**Target audience:** Anaesthesiologist, Clinician, Emergency medicine doctor, Fellow, Intensivist/critical care physician, Junior member, Paediatrician, Physiologist, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist

**Chairs:** Alexandre Demoule (Paris, France)

**Introduction**
Diaphragm ultrasound
Pieter Roel Tuinman (Amsterdam, Netherlands)

Lung ultrasound
Martin Dres (Paris, France)

Esophageal balloon for monitoring breathing effort and transpulmonary pressure
Heder de Vries (Amsterdam, Netherlands)

12:50 - 14:00
Case-based session: Noninvasive ventilation - practical aspects

**Aims:** To approach different scenario in which volume-target ventilation may clearly improve efficacy of ventilation and understand possible limits and traps of different algorithms and ventilators used; To discuss the application of other tools in alternative to long-term NIV.

**Disease(s):** Chronic respiratory failure

**Target audience:** Clinician, Physiotherapist, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist, Sleep specialist/technologist

**Chairs:** Friederike Sophie Magnet (Köln, Germany)

**Case presentation:** Advanced Physiological Monitoring during COPD Exacerbation and Nasal High-Flow Administration
Rebecca D'Cruz (London, United Kingdom)

**Case presentation:** Neuromuscular Disorders, a day-to-day challenge
Joana Batista Correia (Viseu, Portugal)

**Case presentation:** NIV-induced neck lymphoedema in OSA-COPD overlap syndrome: a case report
Ivana Paranicova (Košice, Slovakia)

12:50  
**Target volume ventilation: when and how?**
Cesare Gregoretti (Palermo, Italy)

13:00  
**Alternatives to long-term NIV**
Lara Pisani (Bologna (BO), Italy)

12:50 - 14:00
Case-based session: Monitoring of mechanical ventilation in children

**Aims:** To provide participants with practical information on the monitoring of mechanical ventilation in children and its usefulness.

**Disease(s):** Paediatric respiratory failure

**Target audience:** Clinician, Emergency medicine doctor, Intensivist/critical care physician, Neonatologist, Paediatrician, Pulmonologist, Respiratory physician, Sleep specialist/technologist

**Chairs:** Christopher Milesi (Montpellier, France)

12:50  
**Monitoring of invasive ventilation**
Martin Kneyber (Groningen, Netherlands)

13:00  
**Patient-ventilator interaction: assessment and clinical relevance**
Guillaume Emeriaud (Montreal, Canada)

12:50 - 14:00
Case-based session: Monitoring the ventilated patient

**Aims:** To learn about advanced respiratory mechanics and monitoring of ARDS patients.

**Disease(s):** Adult acute respiratory failure

**Target audience:** Anaesthesiologist, Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee

**Chairs:** Alexandre Demoule (Paris, France)

**Case presentation:** A case of life threatening asthma and pneumomediastinum
Speaker to be confirmed

**Case presentation:** A fatal endobronchial mucormycosis mimicking as endobronchial tuberculosis
Hae-Seong Nam (Incheon, Republic of Korea)
Case presentation: Acute respiratory failure due to hypoventilation associated to diaphragmatic disfunction
Sónia Isabel Silva Guerra (Viseu, Portugal)

Case presentation: Respiratory insufficiency in a patient with rare mitochondrial myopathy T>C transition at position 13271 in MTND5 gene
Sankanika Roy (Asian/Asian British, United Kingdom)

Case presentation: Acute Flaccid Paralysis by Enterovirus D68 Infection-the beginning of Polio epidemic?
Syeda Nafisa (Nottingham, United Kingdom)

12:50 Advanced respiratory mechanics
Leo Heunks (Amsterdam, Netherlands)

13:00 ARDS: state of the art
Lieuwe Bos (Amsterdam, Netherlands)

14:10 - 16:30
Skills workshop: Respiratory monitoring
Aims: To learn to visualize the diaphragm and the lung using ultrasound and how it can help in diagnosis of respiratory failure; to know the practical aspects of esophageal balloon insertion can how esophageal balloon can help in medical decision making; to learn the interpretation of signals derived from esophageal balloon.
Disease(s): Adult acute respiratory failure
Chairs: Pieter Roel Tuinman (Amsterdam, Netherlands)

Introduction

Diaphragm ultrasound
Elise Morawiec (Paris, France)

Lung ultrasound
Lara Pisani (Bologna (BO), Italy)

Esophageal balloon for monitoring breathing effort and transpulmonary pressure
Martin Kneyber (Groningen, Netherlands)

14:10 - 15:10
Oral poster discussion: Chronic noninvasive ventilation
Disease(s): Chronic respiratory failure
Chairs: Peter J. Wijkstra (Groningen, Netherlands), Marieke L. Duiverman (Groningen, Netherlands), Chair to be confirmed

Adaptation to noninvasive ventilation in an outpatient setting: our experience
Carla Ribeiro (Porto, Portugal), Carla Nogueira, Daniela Ferreira, Sara Conde Ramsay

Does tracheostomy ventilation in MND in the UK lead to improved survival?
Jonathan Palmer (Plymouth (Devon), United Kingdom), Bhuvaneswari Kathiresan, Ben Messer, Michelle Ramsay

Home invasive mechanical ventilation in Finland 2015-2019
Petra Kotanen (Espoo, Finland), Hanna-Riikka Kreivi, Pirkko Brander, Waiiteri Siirala

Incidence of chest infections (CI) in patients with neuromuscular disease (NMD) in the first 2 weeks after commencement of Non-Invasive Ventilation (NIV) or Mechanical In-Exsufflation (M-I-E)
Liam Campbell (Newcastle Upon Tyne (Tyne and Wear), United Kingdom), Ben Messer

Is there a risk to home mechanical ventilation patients who are issued with previously used room air ventilators?
Alison Armstrong (Newcastle upon Tyne (Tyne and Wear), United Kingdom), Ben Messer

Long term outcomes of home non-invasive ventilation (NIV) in patients with chronic hypercapnic respiratory failure (CHRF) due to kyphoscoliosis
Marcus Sim (Singapore, Singapore), Anthony Yiu, Thun How Ong, Leong Chai Leow

Management of Home Mechanical Ventilation (HMV) patients admitted in Hypercapnic Respiratory Failure (HRF): reported confidence versus practice
Liam Campbell (Newcastle Upon Tyne (Tyne and Wear), United Kingdom), Katherine George
Measuring adherence to long-term assisted ventilation
Caroline Chao (Melbourne (VIC), Australia), Linda Rautela, Luke Mcdonald, David Berlowitz, Simon Conti, Mark Howard, Liam Hannan

Pneumothorax in neuromuscular disease associated with lung volume recruitment and mechanical insufflation-exsufflation
David Berlowitz (Melbourne (VIC), Australia), Luke Mcdonald, Mark Howard, Linda Rautela, Caroline Chao, Nicole Sheers

Predictors of home use of mechanical insufflation/exsufflation devices: preliminary results from a cross-sectional study
Georgia Mitropoulou (Prilly, Switzerland), Raphael Heinzer, Maura Prella

Updated guidelines for indication of non-invasive positive pressure ventilation (NIPPV) in Slovakia
Pavol Pobela (Košice, Slovakia), Imrich Mucska, Robert Vyšehradský, Marta Hájková, Juraj Jakuba, Ivana Paraničová, Pavol Joppa

14:10 - 15:10
Oral poster discussion: High flow nasal therapy and respiratory muscles

Disease(s): Adult acute respiratory failure | Chronic respiratory failure | Paediatric respiratory failure

Chairs: Paolo Navalesi (Padova, Italy), Lieuwe Bos (Amsterdam, Netherlands)

High flow nasal cannula (HFNC) vs. non-invasive ventilation in severe pneumonia patients with OHS: A prospective study
BoXue Han (Beijing, China), Banghe Li, Ying Wang, Yan Hao, Guofeng Hou, Feng Wang, Jiquan Zhang, Jie Bai, Jinqing Chang, Guangping Lv, Yongxu Chen, Xincheng Qiu

How long should clinicians wait to stop a trial of humidified oxygen via high flow nasal cannula in "de novo" respiratory failure?
Lígia Helena Pires Vicente (Portimão, Portugal), Joao Estevao, Pedro Americano, Daniela Silva, Gloria Cabral Campello

Is the high flow changing the indications of RICU?
Antoni Marin Muiñiz (Badalona (Barcelona), Spain), Irene Aldás Criado, Maria Sol Prats Bardaji, Jorge Abad Capa, Antoni Rosell Gratacós

Nasal humidified high flow oxygen prolongs endurance exercise in interstitial lung disease.
Frédéric Hérent (Dieulefit, France), Daniel Veale, Yara Al Chikhanie, Samuel Vergès

The utility of high-flow nasal cannula ROX index in post-extubation respiratory failure
Szuying Liu (Newtaipei city, Taiwan), yenwei shao, Tejung Chia

Diaphragm thickening fraction versus transdiaphragmatic pressure in healthy subjects and ventilated patients: a breath-by-breath analysis
Thomas Poulard (Paris Cedex 13, France), Quentin Fossé, Jean-Luc Gennisson, Marie-Cécile Niétat, Jean-Yves Hogrel, Thomas Similowski, Alexandre Demoule, Damien Bachasson, Martin Dres

Diaphragm ultrasound and respiratory functional test: a combined approach in amyotrophic lateral sclerosis
Letizia D’Antoni (Guidonia Montecelio (RM), Italy), Antonella Sotgiu, Fausta Viccaro, Krisstopher Richard Flores, Ernesto Di Biase, Paolo Palange

Measurement validity of an electronic inspiratory loading device during inspiratory muscle training in weaning failure patients
Marine Van Hollebeke (Leuven, Belgium), Diego Poddighe, Beatrix Clerckx, Greet Hermans, Rik Gosselink, Daniel Langer

Temporary transvenous diaphragmatic neurostimulation distributes tidal volume in a more physiological pattern versus mechanical ventilation alone.
Elizabeth Rohrs (Surrey, Canada), Thiago Bassi, Karl Fernandez, Marlena Ornowska, Michelle Nicholas, Steven Reynolds

The utility of esophageal pressure measurement in acute hypercapnic respiratory failure due to severe COPD exacerbation requiring NIV
Alexandru Tudor Steriade (Bucuresti, Romania), Mihai Gologanu, Daniela Necula, Nicoleta Sargarovschii, Diana Radu, Diana Ionita, Cornelia Tudose, Dragos Bumbacea

Ultrasound shear wave elastography for non-invasive assessment of diaphragm activity in mechanically ventilated patients.
Quentin Fossé (Paris, France), Thomas Poulard, Jean Yves Hogrel, Jean Luc Gennisson, Thomas Similowski, Alexandre Demoule, Marie Cécile Niérat, Damien Bachasson, Martin Dres
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<th>Chairs</th>
<th>Disease(s)</th>
<th>Presenters</th>
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<tr>
<td>14:10 - 15:10</td>
<td>Oral poster discussion: Invasive mechanical ventilation</td>
<td>Cesare Gregoretti (Palermo, Italy), Heder de Vries (Amsterdam, Netherlands)</td>
<td>Adult acute respiratory failure</td>
<td>﴾ Effects of BMI on clinical outcomes in acute respiratory failure requiring invasive mechanical ventilation ﴿ Omar Mahmoud (New York, United States of America), Bing Chen, Abhishek Chakraborti</td>
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<td>﴾ Esterification of iloprost enhances its protective effects on pulmonary endothelium ﴿ Konstantin Birukov (Baltimore, United States of America), Yunbo Ke, Yue Li, Kamoltip Promnares, Anna Birukova</td>
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<td>﴾ Focus group on mechanical in- exsufflation in invasively ventilated intensive care patients. ﴿ Willemke Stilma (Amsterdam, Netherlands), Frederique Paulus, Marcus Schultz, Bea Spek, Wilma Scholte Op Reimer, Louise Rose</td>
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<td>﴾ Impact of the phosphatidylcholine treatment program on the respiratory failure in patients with community-acquired pneumonia ﴿ Olga Shtepa (Dnipro, Ukraine)</td>
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<td>﴾ Influence and complications of tracheotomy on V-V ECMO: a 10-year analysis ﴿ Christoph Fisser (Regensburg, Germany), Patricia Lüdtke, Andreas Lüdtke, Matthias Lubnow, Maximilian V. Malfertheiner, Alois Philipp, Maik Foltan, Dirk Lunz, Thomas Müller</td>
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<td>﴾ Predictive factors of noninvasive ventilation failure for acute exacerbation of COPD ﴿ Maria Joao Freitas Ferreira Araujo (Guimaraes, Portugal), Rita Ortiga, Diana Pimenta, Ana Luisa Vieira, Lurdes Ferreira</td>
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<td>﴾ Role of the advanced device with auto-titrating EPAP in ARDS patients ﴿ BoXue Han (Beijing, China), Lishun Yue, Maoliang Tian, Lei Sun, Zhiqiang Zhao, Fuzhou Liu, Hui Liu</td>
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<td>﴾ Scores of community acquired pneumonia for predicting intensive care admission and mortality ﴿ Lamia Shaaban (Assiut, Egypt), Mohamed Metwally, Eman Monazee</td>
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<td>﴾ Signaling in vascular endothelium by varying degrees of mechanical stretch ﴿ Anna Birukova (Baltimore, United States of America), Pratap Karki, Chen-Ou Zhao, Yunbo Ke, Konstantin Birukov</td>
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<td>﴾ The association of subglottic secretion drainage and tracheal mucosa injury ﴿ Li Yiating (Taichung, Taiwan), Wang Yaochen</td>
</tr>
</tbody>
</table>
08:00 - 09:30
Live streamed
Symposium: Noninvasive ventilation (NIV) in COPD
Aims: To provide an overview of current evidence about different aspects of long-term NIV applied to hypercapnic COPD patients: which are the goals of ventilation? How to “personalise” the therapy and how to make a good patient selection? To discuss the results of the recent task force on long-term NIV in COPD.
Disease(s): Chronic respiratory failure
Target audience: Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Physiotherapist, Pulmonologist, Respiratory physician, Respiratory therapist, Sleep specialist/technologist
Chairs: Peter J. Wijkstra (Groningen, Netherlands), Michael Dreher (Aachen, Germany)

08:00
Patient selection
Nicholas Hart (London, United Kingdom)

08:30
What are the targets?
Marieke L. Duiverman (Groningen, Netherlands)

09:00
ERS Task Force on long-term NIV in COPD
Wolfram Windisch (Cologne, Germany)

08:00 - 09:30
Live streamed
Symposium: Specific ventilation strategies in children
Aims: To provide an update on specific ventilation strategies.
Disease(s): Paediatric respiratory failure
Target audience: Anaesthesiologist, Emergency medicine doctor, Intensivist/critical care physician, Neonatologist, Paediatrician, Pulmonologist, Respiratory therapist, Sleep specialist/technologist
Chairs: Linda Corel (Rotterdam, Netherlands), Paolo Navalesi (Padova, Italy)

08:00
NAVA
Guillaume Emeriaud (Montreal, Canada)

08:30
ECMO
Pons Odena Marti (Barcelona, Spain)

09:00
High flow nasal cannula in acute and chronic respiratory failure
Christopher Milesi (Montpellier, France)

08:00 - 09:30
Live streamed
Symposium: Mechanical ventilation in specific cases
Aims: To learn IMV strategies in different chronic pulmonary diseases.
Disease(s): Adult acute respiratory failure
Target audience: Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee
Chairs: Marcus Schultz (Amsterdam, Netherlands), Lara Pisani (Bologna (BO), Italy)

08:00
Mechanical ventilation in obstructive lung disease
Lise Piquilloud (Lausanne, Switzerland)

08:30
Mechanical ventilation in interstitial lung disease
Martin Dres (Paris, France)

09:00
Ventilation strategies during weaning
Nicholas Hart (London, United Kingdom)

10:00 - 12:00
Live streamed
Symposium: Adverse effects of mechanical ventilation
Aims: To understand how mechanical ventilation may induce hair and which organs / tissues are at risk.
### DETAILED PROGRAMME

**FRIDAY 14 FEBRUARY, 2020**

<table>
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<th><strong>Disease(s)</strong></th>
<th><strong>Target audience</strong></th>
<th><strong>Chairs</strong></th>
</tr>
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<tbody>
<tr>
<td>Adult acute respiratory failure</td>
<td>Anaesthesiologist, Clinician, Emergency medicine doctor, Fellow, Intensivist/critical care physician, Junior member, Paediatrician, Physiologist, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist, Scientist</td>
<td>Paolo Navalesi (Padova, Italy), Lara Pisani (Bologna (BO), Italy)</td>
</tr>
</tbody>
</table>

| **10:00** | **Heart - lung interaction** | Pieter Roel Tuinman (Amsterdam, Netherlands) |
| **10:30** | **Ventilator - induced lung injury** | Marcus Schultz (Amsterdam, Netherlands) |
| **11:00** | **Ventilator induced respiratory muscle injury** | Alexandre Demoule (Paris, France) |
| **11:30** | **Long-term consequences of mechanical ventilation** | Sangeeta Mehta (Toronto, Canada) |

**15:15 - 17:15**

**Live streamed**

**Symposium: Noninvasive ventilation and high flow nasal therapy (HFNT)**

**Aims:** To describe the indications and standards of practice for NIV and HFNO in different clinical situations.

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<tbody>
<tr>
<td>Adult acute respiratory failure</td>
<td>Anaesthesiologist, Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee</td>
<td>Leo Heunks (Amsterdam, Netherlands), Lise Piquiloud (Lausanne, Switzerland)</td>
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| **15:15** | **The role of high flow nasal oxygen therapy in hypoxemic respiratory failure** | Elise Morawiec (Paris, France) |
| **15:35** | **NIV in hypercapnic acute respiratory failure: COPD** | Stefano Nava (Bologna (BO), Italy) |
| **15:55** | **NIV in hypercapnic acute respiratory failure: non-COPD** | Paolo Navalesi (Padova, Italy) |
| **16:15** | **High flow nasal therapy in hypercapnic acute respiratory failure** | Alexandre Demoule (Paris, France) |
| **16:35** | **NIV use post-extubation** | Laurent Brochard (Toronto ON, Canada) |
| **16:55** | **NIV in palliative care** | Anita Simonds (London, United Kingdom) |

**15:15 - 17:15**

**Live streamed**

**Symposium: Prolonged Weaning**

**Aims:** To focus on the specific group of patients with prolonged weaning.

<table>
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<th><strong>Disease(s)</strong></th>
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<tbody>
<tr>
<td>Adult acute respiratory failure, Chronic respiratory failure</td>
<td>Anaesthesiologist, Cardiologist, Clinician, Epidemiologist, Fellow, Intensivist/critical care physician, Junior member, Physiotherapist, Psychologist, Public health official, Pulmonologist, Resident, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist, Social worker, Student, Trainee</td>
<td>Nicholas Hart (London, United Kingdom), Sarah Schwarz (Köln, Germany)</td>
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</table>

| **15:15** | **Weaning in long-term acute care hospitals** | Martin J. Tobin (Hines, United States of America) |
| **15:55** | **Treatment strategies** | Nicholas Hart (London, United Kingdom) |
| **16:35** | **Unsuccessful weaning: what comes next?** | Friederike Sophie Magnet (Köln, Germany) |
13:00 - 14:00

Meet the Expert: Weaning failure in children

**Aims:** To discuss the therapeutic options in case of weaning from invasive and noninvasive ventilation.

**Disease(s):** Paediatric respiratory failure

**Target audience:** Intensivist/critical care physician, Paediatrician, Pulmonologist, Respiratory physician, Respiratory therapist

**13:00**

Weaning failure in children

Pons Odena Marti (Barcelona, Spain)

13:00 - 14:00

Meet the Expert: Sleep-related hypoventilation

**Aims:** To understand strategies in diagnosis and treatment in patients with sleep-related hypoventilation.

**Disease(s):** Chronic respiratory failure

**Target audience:** Anaesthesiologist, General practitioner, Intensivist/critical care physician, Junior member, Nurse, Otolaryngologist, Paediatrician, Patient, Pulmonologist, Researcher, Resident, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist, Student, Trainee

**13:00**

Sleep-related hypoventilation

Marieke L. Duiverman (Groningen, Netherlands)

13:00 - 14:00

Meet the Expert: The practice of sedation in critically ill patients

**Aims:** To learn how to assess the status of the patient; to assess the level of sedation; to know the use of different kind of drugs to sedate the patients (i.e. sedation vs analgesia); to understand the practice of sedation during invasive and noninvasive ventilation.

**Disease(s):** Adult acute respiratory failure

**Target audience:** Anaesthesiologist, Emergency medicine doctor, Intensivist/critical care physician, Physiotherapist, Respiratory physician, Respiratory therapist

**13:00**

The practice of sedation in critically ill patients

Sangeeta Mehta (Toronto, Canada)

09:45 - 12:05

Skills workshop: How to set the ventilator based on individual conditions

**Aims:** To address practical aspects of non-invasive ventilation; to address problem-solving strategies in case of individual problems occurring during NIV-commencement; to provide recommendations for handling NIV-patients with specific emphasis on the underlying condition.

**Disease(s):** Chronic respiratory failure

**Target audience:** Anaesthesiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Nurse, Paediatrician, Pulmonologist, Resident, Respiratory physician, Respiratory therapist

**Chairs:** Michael Dreher (Aachen, Germany)

- How to assess sleep quality during NIV
  Nicholas Hart (London, United Kingdom)

- How to establish high-intensity NIV in COPD
  Sarah Schwarz (Köln, Germany), Gerrie Bladder (Groningen, Netherlands)

- How to use transcutaneous CO2 monitoring for long-term NIV
  Friederike Sophie Magnet (Köln, Germany)

- What is necessary for neuromuscular patients in addition to NIV?
  Anita Simonds (London, United Kingdom)

14:10 - 16:30

Skills workshop: How to set the ventilator based on individual conditions
Aims: To address practical aspects of non-invasive ventilation; to address problem-solving strategies in case of individual problems occurring during NIV-commencement; to provide recommendations for handling NIV-patients with specific emphasis on the underlying condition.

Disease(s): Chronic respiratory failure

Chairs: Heder de Vries (Amsterdam, Netherlands)

14:10 How to assess sleep quality during NIV
Jean-Paul Janssens (Genève, Switzerland)

14:10 How to establish high-intensity NIV in COPD
Marieke L. Duiverman (Groningen, Netherlands), Gerrie Bladder (Groningen, Netherlands)

14:10 How to use transcutaneous CO2 monitoring for long-term NIV
Christian Karagiannidis (Cologne, Germany)

14:10 What is necessary for neuromuscular patients in addition to NIV?
Speaker to be confirmed

14:10 - 15:10 Oral poster discussion: Acute noninvasive ventilation

Disease(s): Adult acute respiratory failure

Chairs: Stefano Nava (Bologna (BO), Italy), Martin Dres (Paris, France)

Assessment of non-invasive ventilation in acute severe asthma patients
Mohamed M. Metwally (Assiut, Egypt), Olfat Elshinnawy, Nermeen Abdelaleem, Walaa Mokhtar

Comparison of AVAPS and BIPAP modes in patients with postoperative hypercapnic respiratory failure after open heart surgery
Halime Sinem Barutçu (İstanbul, Turkey), Ece Altınay, Halide Ou, Mine Günden Polat

Non invasive proportional assist ventilation versus pressure support ventilation in management of acute respiratory failure of COPD
Khaled Hussein (Assiut, Egypt), Gamal Rabie

Non-Invasive Ventilation (NIV) in Level 3 areas at a NHS Foundation Trust: A quality improvement project
Laura Mylott (Burgess Hill, United Kingdom), Charlene Goh, Kelly Morris

Predictive factors for non-invasive ventilation failure during acute respiratory distress syndrome
Amira Jamoussi (Ariana, Tunisia), Nouha Bouker, Samia Ayed, Takoua Merhebene, Jalila Ben Khelil, Mohamed Besbes

Professional training on the application of non-invasive ventilation in nursing practice
Kornelija Erdelja (Zagreb, Croatia), Azra Hodžić, Ivana Barisic, Kristina Pauker, Sladana Rezic, Tanja Zovko, Andreja Sajnic

Risk Factor for Noninvasive Ventilation Failure in Influenza Infection with Acute Respiratory Failure in ED
Karn Suttapanit (Bangkok, Thailand), Pitsucha Sanguanwit Sanguanwit, Jeeranun Boriboon

The impact of left heart dysfunction in patients with obesity hypoventilation syndrome with acute on chronic respiratory failure
Alexandru Tudor Steriade (Bucuresti, Romania), Gabriela Ganea, Bogdan Nuta, Daniela Necula, Nicoleta Sarginovschi, Diana Radu, Diana Ionita, Cornelia Tudose, Dragos Bumbacea

Ventilatory management in acute respiratory failure of patients with obesity-hypoventilation syndrome
Amira Jamoussi (Ariana, Tunisia), Rachid Ghabara, Ameni Khaled, Samia Ayed, Jalila Ben Khelil, Mohamed Besbes

Ward-based non-invasive ventilation for acute hypercapnic respiratory failure unrelated to chronic obstructive pulmonary disease
Bandar Faqihi (Birmingham (West Midlands), United Kingdom), Dhruv Parekh, Ross Edgar, Samuel Trethewey, Julian Morlet, Alice Turner

14:10 - 15:10 Oral poster discussion: Chronic obstructive pulmonary disease

Disease(s): Adult acute respiratory failure Chronic respiratory failure

Chairs: Lieuwe Bos (Amsterdam, Netherlands), Chair to be confirmed
### Acute Hypercapnic Respiratory Failure in Patients with Chronic Obstructive Pulmonary Disease Associated with Non-Tuberculous Mycobacterial Disease
Alizamin Sadigov (Baku, Azerbaijan)

### Assessing symptom burden and depression in patients with chronic respiratory insufficiency
Heidi Rantala (Pirkkala, Finland), Sirpa Leivo-Korpela, Anni Hanhimäki, Lauri Lehtimäki, Juho T Lehto

### Impact of smoking habits in COPD patients under home noninvasive ventilation
Eduarda M. Tinoco (Porto, Portugal), Ana R. Gigante, Carla Nogueira, Daniela Ferreita, Sara Conde, Carla Ribeiro

### In-hospital mortality in patients with acute exacerbations of chronic obstructive pulmonary disease with and without non-invasive ventilation
Alizamin Sadigov (Baku, Azerbaijan)

### Nasal high-flow versus non-invasive ventilation in patients with chronic hypercapnic COPD
Jens Bräunlich (Leipzig, Germany), Dominic Dellweg, Andreas Bastian, Torsten-Gerriet Blum, Stephan Budweiser, Winfried Randerath, Dora Triché, Martin Bachmann, Christian Köhler, Abdel Hakim Bayarassou, Irnhild Mäder, Jens Geiseler, David Petroff, Norbert Köhler, Hubert Wirtz

### Predictive factors for readmission of patients with Acute Exacerbation of Chronic Obstructive Pulmonary Disease and respiratory failure
Diana Fimenta (Braga, Portugal), Marta João Araújo, Rita Ortiz, Ana Luisa Vieira, Rui Rolo, Lurdes Ferreira

### Pursed-lip breathing ventilation for the treatment of hypercapnic respiratory failure in COPD
Christoph Jünger (Kiel, Germany), Karoline I. Gaede, Christian Herzmann, Christoph Lange, Maja Reimann, Stephan Rülller

### Respiratory parameters in patients with COPD during physical exercises
Kira Ageeva (Ryazan, Russian Federation), Evgeny Filippov, Vladimir Abrosimov

### Short-term systemic steroid therapy in chronic obstructive pulmonary disease patients with acute respiratory failure
Lamia Shaaban (Assiut, Egypt), Shereen Farghaly, Ashraf Zin El-Abdeen, Hanan Galal, Entsar Mohammed

### The estimated cost of chronic obstructive pulmonary disease exacerbation in intensive care unit
Amira Jamoussi (Ariana, Tunisia), Laaroussi Safouene, Saula, Takoua Merhebene, Samia Ayed, Jalila Ben Khelil, Mohamed Besbes

### 14:10 - 15:10

**Oral poster discussion: Paediatrics and Quality of life**

**Disease(s):**  
- Adult acute respiratory failure  
- Paediatric respiratory failure  
- Chronic respiratory failure

**Chairs:** Brigitte Fauroux (Paris, France), Sangeeta Mehta (Toronto, Canada)

- **Effect of tidal volume and nebuliser position on aerosol delivery during neonate ventilation**  
  Gavin Bennett, Paul McKiernan, Mary Joyce, Amy Tatham, Ronan Macloughlin, Speaker to be confirmed

- **Correlation in the use of invasive and non-invasive mechanical ventilation**  
  Azra Hodzic (Dubranec, Croatia), Kornelija Erdelja, Ivana Barisic, Sladana Rezic, Tanja Zovko, Andreja Sajnic

- **In vitro aerosol delivery by vibrating mesh nebulizer (VMN) and pressurized metered dose inhaler (pMDI) using spacers in comparison with T adapters in mechanical ventilation.**  
  alison vanlaeys (Valognes, France), Myriam Eckes, Alice Paris, Brenda Hervieu, Alison Vanlaeys, Karim Housseini, Thierry Portée

- **Impact of the duration of renal replacement therapy on the respiratory complications in patients with end-stage renal disease**  
  Olga Shtepa (Dnipropetrovsk, Ukraine), Olga Shtepa, Oleksandr Kuryata, Olha Halushchak

- **Interfaces for non invasive ventilation in children**  
  Matteo Masolini (Firenze (FI), Italy), Chiara Castellani, Chiara Degli Innocenti, Diletta Innocenti, Riccardo Guarise, Rachele Locarno, Beatrice Ferrari, Niccolò Nasi

- **Non-invasive ventilation in patients with Motor neurone disease: the experience of a large tertiary hospital.**  
  Parniya Arooj (Truro, United Kingdom), Parniya Arooj, Hem Rai, Bhuvaneswari Kathiresan, Jonathan Palmer
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<td>Providing bespoke equipment adaptations to promote independence and</td>
<td>Alison Armstrong (Newcastle upon Tyne (Tyne and Wear), United Kingdom),</td>
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<td>quality of life for users of long term ventilation (LTV)</td>
<td>Alison Armstrong, Graham Henderson</td>
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<td>The use of home Non-Invasive ventilation in Cystic Fibrosis in a</td>
<td>Clare Halfhide (Warrington (Cheshire), United Kingdom), Meg Macdonald,</td>
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<td>large UK regional paediatric Service.</td>
<td>Kim Lund, Amanda Reed, Elinor Burrows, Kevin W Southern</td>
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<td>Tracheostomy ventilation in MND: A snapshot of UK practice</td>
<td>Jonathan Palmer (Plymouth (Devon), United Kingdom), Bhuvaneswari Kathiresan, Ben Messer, Michelle Ramsey</td>
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<td>Ventilation on a PEEP/FIO2 combination table in children with</td>
<td>Herng Lee Tan (Singapore, Singapore), Yi-Jyun Ma, Siew Wah Lee, Apollo</td>
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<td>pediatric acute respiratory distress syndrome</td>
<td>Bugarin Aguilan, Yee Hui Mok, Jan Hau Lee, Judith Ju-Ming Wong</td>
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08:00 - 09:30
Live streamed
Symposium: Health-related quality (HRQL) of life in patients with long-term ventilation

Aims: To address the important issue of health-related quality of life (HRQL) in patients with long-term mechanical ventilation; to discuss the methodology of HRQL assessment and clinical data.

Disease(s): Chronic respiratory failure

Target audience: Anaesthesiologist, Cardiologist, Clinician, Fellow, Lung function technician, Patient, Physiologist, Physiotherapist, Psychologist, Public health official, Pulmonologist, Researcher, Resident, Respiratory physician, Scientist, Sleep specialist/technologist, Social worker, Student, Trainee

Chairs: Jean-Paul Janssens (Genève, Switzerland), Peter J. Wijkstra (Groningen, Netherlands)

08:00  Methods of HRQL assessment
Marieke L. Duiverman (Groningen, Netherlands)

08:30  HRQL in NIV
Wolfram Windisch (Cologne, Germany)

09:00  HRQL in tracheotomized patients
Friederike Sophie Magnet (Köln, Germany)

08:00 - 09:30
Live streamed
Symposium: Noninvasive ventilation outside the ICU

Aims: To provide an update on the most recent developments of CPAP and NIV in children outside the ICU.

Disease(s): Paediatric respiratory failure

Target audience: Emergency medicine doctor, Intensivist/critical care physician, Paediatrician, Pulmonologist, Respiratory physician, Respiratory therapist, Sleep specialist/technologist

Chairs: Cesare Gregoretti (Palermo, Italy), Alessandro Amaddeo (Paris, France)

08:00  NIV as a transition from the ICU to the home
Pons Odena Marti (Barcelona, Spain)

08:30  Update on long term CPAP
Brigitte Fauroux (Paris, France)

09:00  Update on long term NIV
Linda Corel (Rotterdam, Netherlands)

08:00 - 09:30
Live streamed
Symposium: Rescue therapies for respiratory failure

Aims: To give indications for rescue therapies; to describe advantages and disadvantages.

Disease(s): Adult acute respiratory failure

Target audience: Anaesthesiologist, Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee

Chairs: Christian Karagiannidis (Cologne, Germany), Lise Piquilloud (Lausanne, Switzerland)

08:00  Prone positioning and recruitment manouvre
Marcus Schultz (Amsterdam, Netherlands)

08:30  Extracorporeal CO2 removal
Stefano Nava (Bologna (BO), Italy)

09:00  ECMO
Christian Karagiannidis (Cologne, Germany)

10:00 - 11:15
Live streamed
Symposium: Diagnostic techniques during mechanical ventilation
Aims: To learn the contra-/indications and interpretation of the diagnostic results of lung ultrasound, esophageal pressure monitoring and bronchoscopy in mechanically ventilated patients.

Disease(s): Adult acute respiratory failure | Chronic respiratory failure | Paediatric respiratory failure

Target audience: Anaesthesiologist, Cardiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident

Chairs: Sangeeta Mehta (Toronto, Canada), Heder de Vries (Amsterdam, Netherlands)

10:00 Lung ultrasound
Marcus Schultz (Amsterdam, Netherlands)

10:25 Esophageal pressure monitoring
Laurent Brochard (Toronto (ON), Canada)

10:50 Bronchoscopy in mechanically ventilated patients
Lieuwe Bos (Amsterdam, Netherlands)

15:45 - 17:20
Symposium: Closing session: Year in Preview

Aims: To discuss important developments and studies that are coming up and how the future might look like.

Disease(s): Adult acute respiratory failure | Chronic respiratory failure | Paediatric respiratory failure

Target audience: Anaesthesiologist, Clinician, Intensivist/critical care physician, Pulmonologist, Researcher, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist

Chairs: Leo Heunks (Amsterdam, Netherlands)

15:45 Year in preview “paediatric” track
Brigitte Fauroux (Paris, France)

16:15 Year in preview “acute” track
Marcus Schultz (Amsterdam, Netherlands)

16:45 Year in preview “chronic” track
Wolfram Windisch (Cologne, Germany)

11:30 - 12:30
Meet the Expert: Measurements of nocturnal gas exchange

Aims: To provide participants with an overview of the required technical skills in monitoring nocturnal gas exchange as well as the fields of use and limitations of the different techniques available today.

Disease(s): Chronic respiratory failure

Target audience: Clinician, Physiotherapist, Pulmonologist, Resident, Respiratory physician

11:30 Measurements of nocturnal gas exchange
Jean-Paul Janssens (Genève, Switzerland)

11:30 - 12:30
Meet the Expert: Understanding the ventilator waveform

Aims: To understand all points of the waveform and its changes.

Disease(s): Adult acute respiratory failure

Target audience: Anaesthesiologist, Clinician, Fellow, Intensivist/critical care physician, Junior member, Pulmonologist, Resident, Student, Trainee

11:30 Understanding the ventilator waveform
Laurent Brochard (Toronto (ON), Canada)

09:45 - 12:05
Skills workshop: How to set the ventilator based on individual conditions in children

Aims: To learn first line and consecutive settings of a ventilator in children with different conditions.
Case-based session: Noninvasive ventilation and noninvasive CPAP in the PICU
Aims: To discuss clinical cases of paediatric noninvasive ventilation and noninvasive CPAP in the PICU.

Case presentation: High flow nasal canula oxygen as non-invasive ventilation modality to treat severe restrictive lung disease in an infant with skeletal anomaly.
Theofilos Polychronakis (Cambridge (Cambridgeshire), United Kingdom)

Case presentation: The successful extubation of a paediatric patient, following 3 previous failed extubations, through the use of non-invasive (NIV) neutrally adjusted ventilator assist (NAVA).
Laura Flaxman (London, United Kingdom), Speaker to be confirmed

11:30 - 12:30

Skills workshop: Core competency in mechanical ventilation
Aims: To understand the principles of controlled mechanical ventilator modes (PCV, VCV); to understand the principles of partially supported modes (PSV); to learn how to measure respiratory mechanics (compliance, Resistance, PEEPi); to understand the principles of safe mechanical ventilation in obstructive airway disease

13:00 - 15:20

Case-based session: Weaning from mechanical ventilation
Aims: To learn definitions and outcomes; to understand reasons for weaning failure and how to treat these factors.
### 13:30 - 15:30

**Case-based session: Problem-solving - Case studies of NIV problems**

**Aims:** To address practical aspects of non-invasive ventilation.

**Disease:** Chronic respiratory failure

**Target audience:** Anaesthesiologist, Cardiologist, Clinician, Emergency medicine doctor, Intensivist/critical care physician, Junior member, Nurse, Physiotherapist, Researcher, Resident, Respiratory physician, Respiratory therapist, Scientist, Sleep specialist/technologist, Student, Trainee

**Chairs:** Stefano Nava (Bologna (BO), Italy), Chair to be confirmed

**Case presentation:** Improved nocturnal gas exchange with high flow nasal cannula in advanced motor neurone disease with non-invasive ventilation intolerance  
Speaker to be confirmed

**Case presentation:** Spontaneous Pneumothorax in a Patient with Duchenne Muscular Dystrophy on Non-Invasive Ventilation  
Darlene Mercieca (Zebbug, Malta)

**Case presentation:** Volume-assured pressure support ventilation in a chest-wall deformity case  
Sónia Isabel Silva Guerra (Viseu, Portugal)

**13:30**  
**Individual titration of nocturnal NIV**  
Jean-Paul Janssens (Genève, Switzerland)

**13:45**  
**Leakages, mask problems and side effects**  
Sarah Schwarz (Köln, Germany)

**14:00**  
**The role of obesity**  
Marieke L. Duiverman (Groningen, Netherlands)
INDUSTRY SPONSORED SESSIONS
THURSDAY 13 FEBRUARY 2020

14:10-15:10 ALEXANDER II

Ventilator Integrated Polygraphy: The latest monitoring solutions for NIV
Organised by Breas

FRIDAY 14 FEBRUARY 2020

14:10-15:10 ALEXANDER II

High Flow Therapy: a paradigm shift from oxygen therapy to respiratory support
Organised by Fischer & Paykel Healthcare
14:10 Mechanisms of actions of the humidified high flow
Lara Pisani (Bologna)
14:30 Use of high flow in the pulmonology department
Manel Lujan (Barcelone)
14:50 Outcomes of a 6 Week crossover NHF vs NIV study on chronic COPD patients
Jens Braünlich (Leipzig)

17:30-19:00 ALEXANDER II

Advances in NIV Therapy
Organised by Philips
Moderator: Prof. Mickael Polkey (Royal Brompton Hospital, London UK)
Optimal NIV in Acute Respiratory Failure
Dr. Carlos Ferrando, MD, PhD (Barcelona, Spain)
The impact and concerns of Expiratory Flow Limitation in COPD during sleep
Dr. Javier Sayas Catalán (Madrid, Spain)
Theory and Applications of Monitored Pulmonary Mechanics in NIV
Bill Truschel (Principal Scientist, Philips, USA), Prof. Michael Polkey (London, United Kingdom)
# CHAIR AND COORDINATOR INDEX

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BOS L.

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DUIVERMAN M.

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