

### **ARF SECTION MEETING - AGENDA**



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### **UPDATE ARF SECTION COURSES - EDUCATION**







#### **Fundamentals course**

**Transition course** 

### Expert course



# ARF Section Educational activities

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							•	Master Class on Mechanical Ventilation – S	tructure
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							•	Fundamentals course	
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				•					Towards a certification?
								Transition course	Towards an ESICM book
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# **ACTIVITIES ENDORSED BY THE ARF**





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# ESICM GUIDELINES ON ARDS

Training Programme

# Summary ESICM Guidelines

61 panelists

9 domains

16 PICOs

Patients Representatives

	2017	2023	CHANGE IN RECOMMENDATION	COMMENTS
Definition			*	No comparison available as the <b>2017</b> guidelines did not include a Definition domain.
Phenotypes			*	No comparison available as the <b>2017</b> guidelines did not include an ARDS Phenotype domain.
High flow nasal oxygen			*	No comparison available as the <b>2017</b> guidelines did not include recommendations on high flow nasal oxygen.
Non-invasive ventilation			*	No comparison available as the <b>2017</b> guideline did not include recommendations on non-invasive ventilation.
Tidal volume			۲	In agreement with the use of low tidal volume strategies. <b>2023</b> guidelines extend this recommendation to patients with COVID-1
Positive end-expiratory pressure			۲	<ul> <li>2017: suggest that adult patients with moderate or severe ARDS receining higher rather than lower levels of PEEP.</li> <li>2023: analysis of data does not allow to make a recommendation for cagainst higher PEEP strategy.</li> </ul>
Recruitment maneuvers			۲	<b>2017:</b> suggest that adult patients with ARDS receive RMs. <b>2023:</b> recommend against RMs due to increased mortality and risks.
Oscillatory ventilation				<ul><li>2017: recommend that HFOV not be used routinely in patients with moderate or severe ARDS.</li><li>2023: not examined given the absence of studies since 2017 and the lack of use of HFVO in adults.</li></ul>
Prone position			۲	Agreement with the use of prone position in ARDS. Additions in <b>2023</b> are the use of awake proning and the use in COVID-19.
Neuromuscular blockade			*	No comparison available as the <b>2017</b> guidelines did not include recommendations on neuromuscular blockade.
Extracorporeal membrane oxygenation			۲	<ul><li>2017: additional evidence is necessary to make a definitive recommendation.</li><li>2023: recommend ECMO in patients with severe ARDS.</li></ul>
Extracorporeal CO <sub>2</sub> removal			*	No comparison available as the <b>2017</b> guidelines did not include recommendations on extracorporeal $CO_2$ removal. <b>2023</b> guidelines recommend against $ECCO_2R$ in ARDS.

ARDS: acute respiratory distress syndrome; COVID-19: coronavirus disease 2019; ECCO<sub>2</sub>R: Extracorporeal CO<sub>2</sub> Removal; ECMO: extracorporeal membrane oxygenation; HFOV: High-frequency oscillatory ventilation; PEEP: positive end-expiratory pressure; RM: recruitment maneuver

# **Team Effort**













L. Camporota

G. Grasselli

C. Calfee

D. Poole

K. Burns

S. Myatra L. Bos





N. Ferguson J. Laffey



J. Beitler



M. Ng Gong







D. McAuley



J. Kesecioglu

Plus many expert members not pictured here, and Guy Francois from ESICM!

# Conclusions



Check for

Intensive Care Med https://doi.org/10.1007/s00134-023-07050-7

#### **CONFERENCE REPORTS AND EXPERT PANEL**

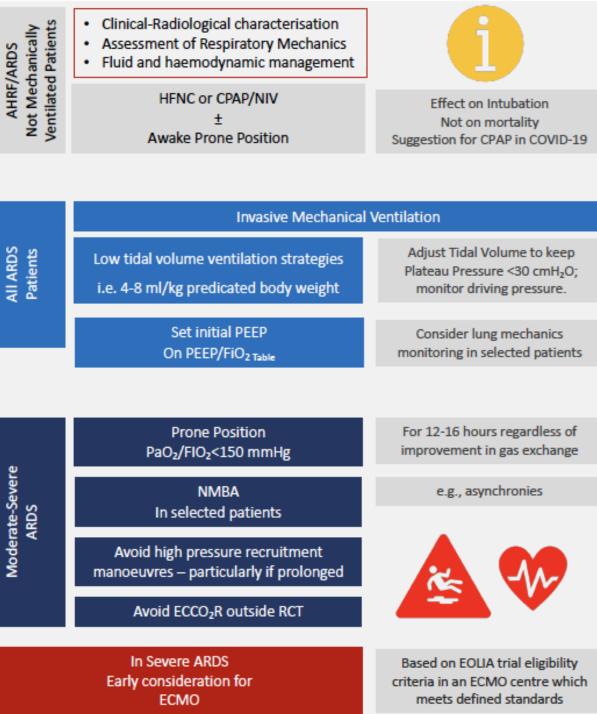
# ESICM guidelines on acute respiratory distress syndrome: definition, phenotyping and respiratory support strategies

Giacomo Grasselli<sup>1,2\*</sup>, Carolyn S. Calfee<sup>3</sup>, Luigi Camporota<sup>4,5</sup>, Daniele Poole<sup>6</sup>, Marcelo B. P. Amato<sup>7</sup>, Massimo Antonelli<sup>8,9</sup>, Yaseen M. Arabi<sup>10,11,12</sup>, Francesca Baroncelli<sup>13</sup>, Jeremy R. Beitler<sup>14</sup>, Giacomo Bellani<sup>15,16</sup>, Geoff Bellingan<sup>17</sup>, Bronagh Blackwood<sup>18</sup>, Lieuwe D. J. Bos<sup>19</sup>, Laurent Brochard<sup>20,21</sup>, Daniel Brodie<sup>22</sup>, Karen E. A. Burns<sup>21,23,24,25</sup>, Alain Combes<sup>26,27</sup>, Sonia D'Arrigo<sup>8</sup>, Daniel De Backer<sup>28</sup>, Alexandre Demoule<sup>29,30</sup>, Sharon Einav<sup>31</sup>, Eddy Fan<sup>21</sup>, Niall D. Ferguson<sup>32,33</sup>, Jean-Pierre Frat<sup>34,35</sup>, Luciano Gattinoni<sup>36</sup>, Claude Guérin<sup>37,38</sup>, Margaret S. Herridga<sup>39</sup>, Carol Hodgson<sup>40,41</sup>, Catherine L. Hough<sup>42</sup>, Samir Jaber<sup>43</sup>, Nicole P. Juffermans<sup>44</sup>, Christian Karagiannidis<sup>45</sup>, Jozef Kesecioglu<sup>46</sup>, Arthur Kwizera<sup>47</sup>, John G. Laffey<sup>48,49</sup>, Jordi Mancebo<sup>50</sup>, Michael A. Matthay<sup>51</sup>, Daniel F. McAuley<sup>18,52</sup>, Alain Mercat<sup>53</sup>, Nuala J. Meyer<sup>54</sup>, Marc Moss<sup>55</sup>, Laveena Munshi<sup>56</sup>, Sheila N. Myatra<sup>57</sup>, Michelle Ng Gong<sup>58,59</sup>, Laurent Papazian<sup>60,61</sup>, Bhakti K. Patel<sup>62</sup>, Mariangela Pellegrini<sup>63</sup>, Anders Perner<sup>64</sup>, Antonio Pesenti<sup>1,2</sup>, Lise Piquilloud<sup>65</sup>, Haibo Qiu<sup>66</sup>, Marco V. Ranieri<sup>67,68</sup>, Elisabeth Riviello<sup>69</sup>, Arthur S. Slutsky<sup>21,24</sup>, Renee D. Stapleton<sup>70</sup>, Charlotte Summers<sup>71</sup>, Taylor B. Thompson<sup>72</sup>, Carmen S. Valente Barbas<sup>73,74</sup>, Jesús Villar<sup>24,75,76</sup>, Lorraine B. Ware<sup>77</sup>, Björn Weiss<sup>78</sup>, Fernando G. Zampieri<sup>79,80</sup>, Elie Azoulay<sup>81</sup> and Maurizio Cecconi<sup>82,83</sup> on behalf of the European Society of Intensive Care Medicine Taskforce on ARDS

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#### Abstract

The aim of these guidelines is to update the 2017 clinical practice guideline (CPG) of the European Society of Intensive Care Medicine (ESICM). The scope of this CPG is limited to adult patients and to non-pharmacological respiratory support strategies across different aspects of acute respiratory distress syndrome (ARDS), including ARDS due to coronavirus disease 2019 (COVID-19). These guidelines were formulated by an international panel of clinical experts, one methodologist and patients' representatives on behalf of the ESICM. The review was conducted in compliance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement recommendations. We followed the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach to assess the certainty of evidence and grade recommendations and the quality of reporting of each study based on the EQUATOR (Enhancing the QUAlity and Transparency Of health Research) network guidelines. The CPG addressed



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### **TASKFORCE ON DYSPNEA**

### Accepted for publication in ERJ



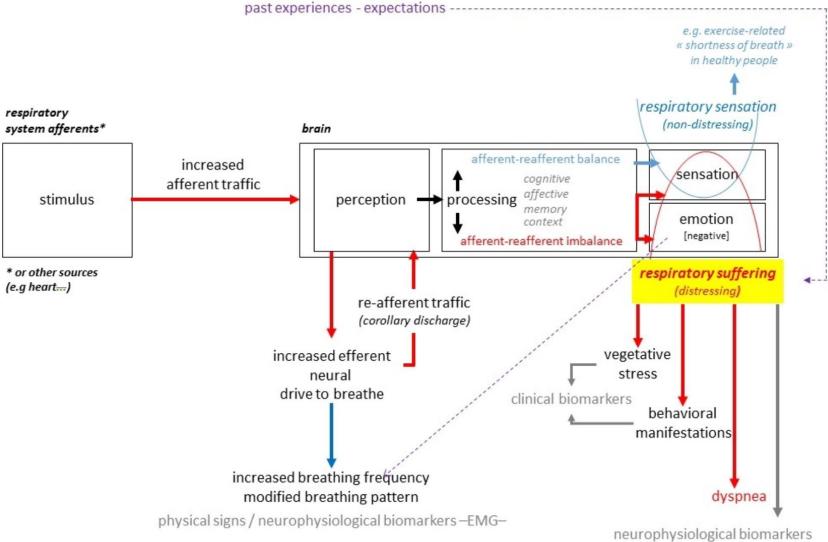
#### Dyspnea in acutely ill mechanically ventilated patients

An ERS/ESICM statement

Alexandre DEMOULE<sup>1,2</sup>, Maxens DECAVELE<sup>1,2</sup>, Massimo ANTONELLI<sup>3</sup>, Luigi CAMPOROTA<sup>4</sup>, Fekri ABROUG<sup>5</sup>, Dan ADLER<sup>6,7</sup>, Elie AZOULAY<sup>8</sup>, Metin BASOGLU<sup>9</sup>, Margaret CAMPBELL<sup>10</sup>, Giacomo GRASSELLI<sup>11,12</sup>, Margaret HERRIDGE<sup>13</sup>, Miriam J JOHNSON<sup>14</sup>, Lionel NACCACHE<sup>15,16</sup>, Paolo NAVALESI<sup>17,18</sup>, Paolo PELOSI<sup>19,20</sup>, Richard SCHWARTZSTEIN<sup>21</sup>, Clare WILLIAMS<sup>22</sup>, Wolfram WINDISCH<sup>23</sup>, Leo HEUNKS<sup>24\*</sup>, Thomas SIMILOWSKI<sup>2,25\*</sup>

\*The two last authors contributed equally to the manuscript.

# Mechanisms and definition



(EMG, EEG, other...to be developed)

#### A. RDOS

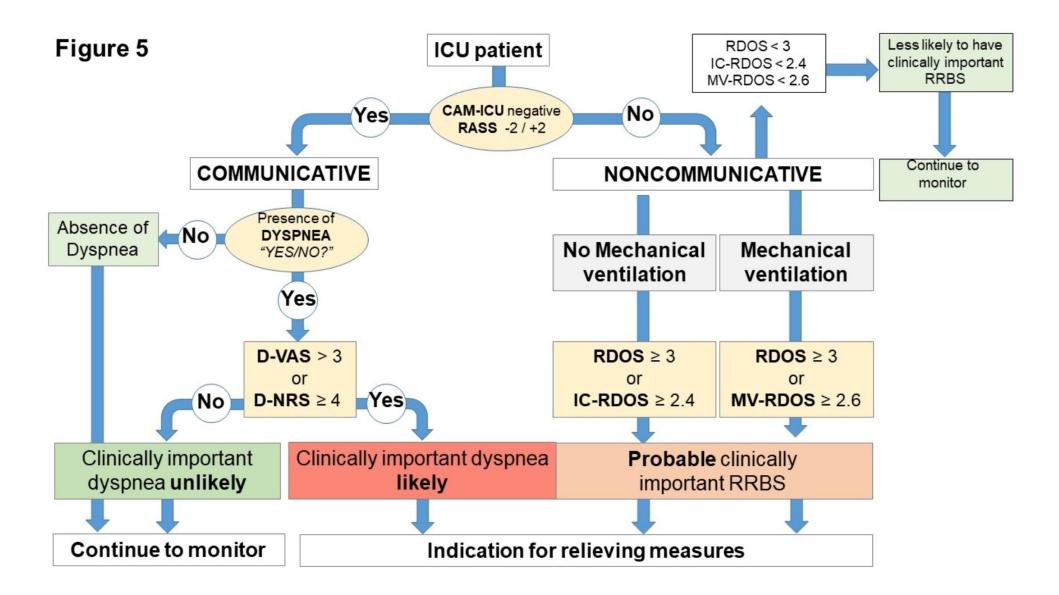
Variables	0 points	1 point	2 points
1- Heart rate (beats/min)	<90	90-109	≥ 110
2- Respiratory rate (breaths/min)	≤ 18	19-30	> 30
3- Restlessness: nonpurposeful movements	None	Occasional, slight movements	Frequent movements
4- Paradoxical breathing pattern: abdomen moves in on inspiration	None		Present
5- Use of neck muscles during inspiration: rise of clavicle during inspiration	None	Slight rise	Pronounced rise
6- Grunting at end inspiration: guttural sound	None		Present
7- Nasal flaring: involuntary movement of nares on inspiration	None		Present
8- Facial expression of fear	None		Eyes wide open, facial muscle tense, brow furrowed, mouth open, teeth together

#### **B. IC-RDOS**

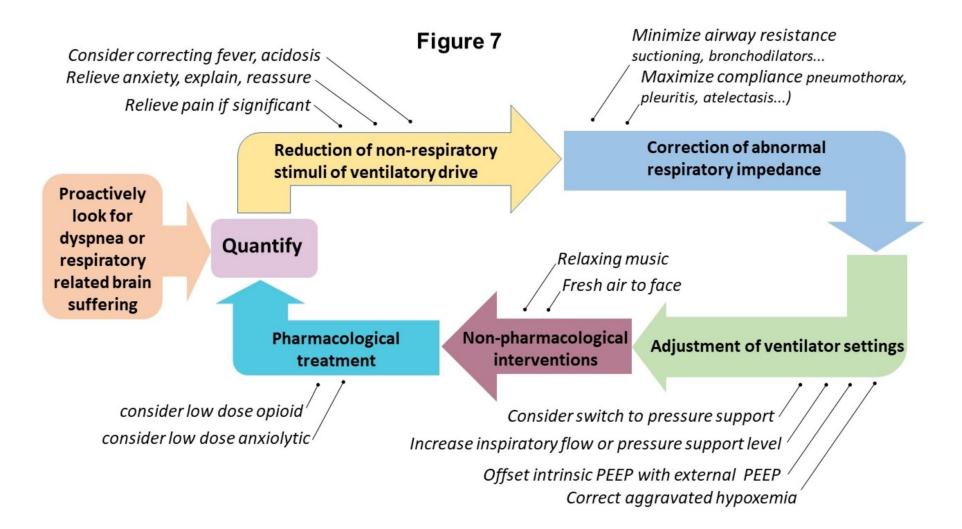
#### C. MV-RDOS

Variables	Score	Variables	Score
0-	3.3	- 0	3.3
1- Heart rate (beats/min)	+ (Heart rate) / 65	-1 Heart rate (beats/min)	+ (Heart rate) / 65
2- Use of neck muscles during		2- Use of neck muscles during	
inspiration	+ 1	inspiration	+ 1
if present	- 1	if present	- 1
if absent		if absent	
3- Paradoxical breathing pattern		3- Paradoxical breathing pattern	
if present	+ 1	if present	+1
if absent	- 1	if absent	- 1
4- Facial expression of fear		4- Facial expression of fear	
if present	+ 1	if present	+ 1
if absent	- 1	if absent	- 1
5- Oxygen supplemental		5- Respiratory rate (breaths/min)	+ (Respiratory
if present	+ 0.7		rate) / 50
if absent	- 0.7		,

# Patient bedside dyspnea assessment algorithm in the intensive care unit setting.



# Step-by-step management of dyspnea in mechanically ventilated patient



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# ESICM ERS – WEANING GUIDELINES









# Clinical Practices Guidelines on Weaning from Mechanical Ventilation

Work in progress, literature review is ongoing

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### **RESEARCH PROJECT IDEAS – CALL FOR PROPOSALS**





# **RESEARCH PROJECT IDEAS – CALL FOR PROPOSALS**

- Types of projects
  - Surveys
  - Observational studies
  - Prospective projects
- Deadline for proposals to the ARF section: 15th of December 2023
- How:
  - short decription of your project (max 2 pages with short rational, research question, design, short methodological description
  - E-mail to <u>lise.piquilloud@chuv</u>.ch)
- 2 or 3 project will be selected to be proposed to ESICM for endorsement in January 2024

# Happy to have your opinion on the following ideas

Ventilation management during pregnancy: observational international study

• Right time for intubation in ARF: DELPHI method to find consensus

 Large scale observational study on assisted ventilation (levels of assist, levels of sedation used, monitoring techniques used, levels of P0.1,...)

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# VACANT POSITIONS – CALL FOR Expression of Interest





# **VACANT POSITIONS – CALL FOR CANDIDATES**

2 representatives from the ARF section for

Social Media Committee

e-Learning Committee

- Deadline for Eol to the ARF section: 15th of Novembre 2023
- How:
  - E-mail to <u>lise.piquilloud@chuv.ch</u>
  - Short biosketch and what makes you apply for the position
- One candidate will be selected for each position and proposed to the ESICM committee

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# **AOB - QUESTIONS ?**



