

EDEC MONOTHEMATIC SESSION: HEART-LUNG INTERACTIONS
17 February 2026 – 09:30 – 16:30 (CET)
Format: Online

Time	Topic	Learning objectives	Experts
09:30	Welcome		Michel Slama
Part I: Physiology of heart-lung interactions according to the mode of breathing <i>Moderator / Facilitator: Bernard Cholley & Michel Slama</i>			
09:35	Physiology of heart-lung interactions in spontaneous breathing	Illustrate during quiet breath Discuss effects of increased WOB Discuss effects of Valsalva maneuver	Florence Boissier (recorded)
09:50	Physiology of heart-lung interactions in ventilated patients. Physiological reasons for pitfalls in fluid-responsiveness prediction	Illustrate effects of PPV Discuss effects of tidal volume & PEEP Discuss influence of lung compliance	Bernard Cholley
10:05	How using CCE to assess heart-lung interactions	Illustrate how 2D and pulse wave imaging can track HL interactions	Michelle Chew
10:20	Q & A		
10:35	Illustrative clinical case #1: HL interactions before and during PPV		Bernard Cholley
10:45	Coffee break		
Part II: Use of heart-lung interactions to predict fluid responsiveness <i>Moderator / Facilitator: Florence Boissier & Philippe Vignon</i>			
11:00	CCE to predict fluid responsiveness in a ventilated patient with ARDS	Illustrate diagnostic work-up with advanced CCE Discuss respective limitations of proposed dynamic indices	Antoine Vieillard-Baron
11:20	CCE to predict fluid responsiveness in a spontaneously breathing patient	Illustrate diagnostic work-up with advanced CCE Discuss respective limitations of proposed dynamic indices	Katerina Jiroutkova
11:40	Q & A		
11:50	CCE to predict fluid responsiveness in a ventilated patient without ARDS	Illustrate diagnostic work-up with advanced CCE Discuss respective limitations of proposed dynamic indices	Marek Nalos
12:05	CCE to predict fluid responsiveness in a patient with atrial fibrillation	Illustrate diagnostic work-up with advanced CCE Discuss respective limitations of proposed dynamic indices	Olivier Hunsicker
12:20	Q & A		
12:30	Lunch		
Part III: Heart-lung interactions in critical illnesses (1) <i>Moderator / Facilitator: Jennifer Hastings & Antoine Vieillard-Baron</i>			
13:30	Heart-lung interactions in tamponade physiology	Illustrate how CCE can be used to document excessive HL interactions Discuss the impact of ventilation mode	Jennifer Hastings
13:50	Heart-lung interactions in patients with ARDS	Illustrate the consequence of ARDS on RV function	Antoine Vieillard-Baron
14:10	Illustrative clinical case #2: use of CCE to guide the ventilator setting		Antoine Vieillard-Baron
14:20	Q & A		
14:30	Coffee break		
Part IV: Heart-lung interactions in critical illnesses (2) <i>Moderator / Facilitator: Martin Balik</i>			
14:45	Heart-lung interactions in patients who develop weaning-induced pulmonary edema (WIPO)	Illustrate the consequences of the transition from PPV to spontaneous breathing Discuss the mechanisms of WIPO and patients at risk	Charlie Cox (recorded)
15:05	Illustrative clinical case #3: a cardiac patient who fails his first SBT		Charlie Cox
15:15	Q & A		
15:30	Heart-lung interactions in patients with acute asthma	Illustrate the consequence of acute asthma on HL interactions	Martin Balik
15:45	Illustrative clinical case #4: a COPD patient who fails SBT		Martin Balik
15:55	Q & A		
16:10	Wrap up		Martin Balik
16:30	End of session		